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LABORATORY DIAGNOSES.

PERHAPS the most impressive feature in the recent history of practical medicine has been the application of laboratory investigations to the art of diagnosis. It is no longer sufficient to hear from the patient an account of his symptoms and to determine his bodily condition by various methods of physical examination. A more searching and penetrating scrutiny is often demanded, and this is usually accomplished by investigations conducted in the laboratory. New discoveries in physics, in chemistry, and in biology, have been applied in the domain of practical medicine, and new methods of diagnosis have thus come into operation. The examination of the various excretions and of the blood, and the application of the *x*-rays, may be mentioned as examples of recent specialised processes which are now constantly called upon to aid the work of the physician and surgeon. As a result of these and similar developments there have come into existence a number of observers who conduct their diagnostic work apart, largely, from the person and symptoms of the individual patient. Equipped with technical knowledge and experience, these clinical pathologists, as they are often called, are frequently able to submit statements of fact, of great value and significance, to the medical practitioner in charge of the patient. The clinical study of the sick man is in this way enlarged, and the art of medicine is made more exact and more confident.

No one with any actual experience of the difficulties of diagnosis presented by many cases, will, for a moment, question the enormous advantages which have accrued from the more careful analytical processes that are now at the disposal of the practitioner. To state these in detail would be to write a large part of recent medical history. Yet, as in most human affairs, the gain is not altogether an unqualified one, and with it there have come new dangers and new risks. Among these may be mentioned a tendency to leave the last word, even in the diagnosis of an individual case, to the laboratory worker. His results appear so clean-cut and so confident, that in them, not only the truth, but the whole truth, would seem to be contained. The true

position, of course, is that these results should be added to the other facts of the case, and that only after a consideration of the whole should the diagnosis be framed. The patient remains, and ever must remain, the central feature of the problem, and whilst all possible aids must be invoked, it is at the bedside and not in the laboratory that the decision of the issue has to be taken. Thus, to whatever degree laboratory methods and processes may be cultivated, there must be no weakening of the demand for the cultivation of careful and minute clinical observation and knowledge.

Another aspect of laboratory practice well worthy of consideration is the bearing which such practice has upon the responsibility of the individual practitioner. It must ever be remembered that the relationship of the patient to his medical adviser is a confidential and personal one. The practitioner in assuming that relationship tacitly accepts this position, and the responsibility which it involves. Is he, in such circumstances, fully justified in expressing an opinion and in advising the patient, when he acts, not upon first-hand information, but upon information conveyed to him by another practitioner who has no personal knowledge of the patient and only a very limited view of the facts to be discussed? Especially acute does such a question become when the report on some particular test rests, not on the authority of some recognised expert worker, but merely on the statement of an unknown laboratory official. In such circumstances the tests have been applied and the results obtained by some person of whose professional value the practitioner in attendance has no means of judging; and this, in view of the personal responsibility of the practitioner to his patient, would appear to raise an ethical question of some delicacy. Even at the best the laboratory worker is not under the same conscious pressure of responsibility as is the clinical adviser, and amidst large numbers of specimens there are dangers of confusion and mishap which can hardly be avoided. It is therefore fair to repeat that the new methods have brought with them dangers and risks as well as advantages and aids.

It remains to be asked whether anything can be done to avoid the accidents possible to the labora-

tory, while at the same time retaining its undoubted value. That laboratory methods and processes are now an essential part of the medical art must be recognised, and the recognition need not be a grudging one. But it seems a necessary conclusion that the individual practitioner must be competent, not only to appreciate, but to check, the results of such processes. Unfortunately the tendency just now appears to be to leave to the laboratory even many tests which formerly were applied in the surgery or the consulting-room. But if personal authority and responsibility are to be maintained, the movement of affairs ought to be in exactly the opposite direction. Allowing that there are a few modern methods which demand much time and a

highly technical equipment, there are still many which can be very easily accomplished. And thus, so far from leaving more and more to the laboratory, it is, in our view, the duty of the practitioner steadily to enlarge his own personal capacity in these modern directions. Even in instances where this is not possible, it seems to us essential that the immediately responsible practitioner shall see personally the results of the tests, and shall not take important decisions on hearsay evidence and on reports which are not authenticated by some recognised and responsible medical authority. Laboratory methods have great value, but they ought to be used, not to contract, but to enlarge, the area of personal observation of the practitioner.

HOSPITAL ABUSE AND THE GENERAL PRACTITIONER.

THE question of hospital abuse is one of vital importance to the general practitioner, for by the continual widening of the portals of the hospitals and the free admission to their administrations for all comers, the possible clientele of the private practitioner tends to be proportionately diminished, and his services are increasingly less indispensable to the public. There is also a tendency for the hospitals to move outwards from the Central London district and bring their services to the very doors of the large suburban areas. Again the increased facilities of locomotion by cheap tram services render a visit to a hospital pleasant and inexpensive. There is too in this vast suburban London an ever-increasing unstable proportion of the population, who live in a hand-to-mouth sort of way, have no permanent abode, have no local interests, and make no provision for sickness. They are thriftless and improvident, yet make a show of respectability and gentility. It is these people who seize every opportunity of getting anything for nothing, who figure conspicuously in the out-patient department of our voluntary hospitals, who support the large suburban theatres and music-halls, but will not support the local doctor so long as a tram-fare will provide them with free medical advice.

This free use of the hospitals not only injures the private practitioner by withdrawing from him a large proportion of his clientele *in posse*, but its moral effect upon the mind of the public is of even greater consequence to him. Instead of the public being taught to estimate their health at a high value, and pay proportionately for its preservation and restoration, this free hospital aid tends to greatly depreciate in their eyes the services of the medical profession, and accordingly to underestimate the remuneration such services are entitled to receive.

If the present out-patient work of the hospitals were replaced by properly organised provident dispensaries, and if the out-patient department of the hospital were restricted to consultative work, specially sent from these dispensaries or from the private practitioner, the unsatisfactory and cursory examination of the patients by the medical officers of the institution could be ended.

It cannot be gainsaid that the hospital is of infinite

service to the private practitioner by supplying, not only a consultant free of charge, but also the technical skill of the specialist and the full equipment of hospital appliances. It is in such cases that the hospital finds its sphere of greatest usefulness, and there can be no better judge of the suitability of a case for hospital treatment than the medical attendant. By a proper restriction of the use of the hospital by the public, a much larger proportion of the community would be compelled to make provision, in one way or another, for the fees of their own doctor, and it would rest with him to decide upon the appropriateness of any particular case for admission to a hospital.

Apart from the charitable relief of the suffering, the hospitals have also a great work to perform, both in the education of those entering the profession, and also in the furtherance of medical and scientific knowledge and research. For these purposes the hospitals require material in the sense of the suffering and the diseased. We are of opinion that the hospitals should not suffer from lack of material were they more dependent upon the general practitioner for the selection of cases, whereas the overcrowded condition of the out-patient department might be considerably relieved. This overcrowding consists largely of patients who are of no value to the teacher or the student, but are a considerable burden to the medical officers in charge and a tax upon the financial resources of the hospital. With the increasing difficulties of the general practitioner there is every probability that the number of students entering the profession will continue to diminish, and the unnecessary overcrowding of hospital out-patients, may force itself upon the attention of the hospital authorities by a lack of newly-qualified medical students to offer their free services as medical officers to these departments. There is no doubt that the hospital was never intended to compete with the private practitioner. It should rather be a source of continual assistance and support to him. We shall welcome the day when it can be shown that, by proper provisions and restrictions, the work of the hospital is made supplemental to that of the general practitioner.

ANNOTATIONS.

Pharmacopœial Revision.

THE issue of a report to the Pharmacopœia Committee of the General Medical Council by the Committee of Reference in Pharmacy, is a practical illustration both of the vigilant criticism which attends the life of a pharmacopœia and of the keen eye which is kept on such criticism by those responsible for the structure of the official volume. It is impossible to turn over the pages of this report without being impressed with the amount of work which is constantly in operation with a view to maintain and increase the value and accuracy of the pharmacopœial drugs and their preparations. It is now eight years since the last edition of the Pharmacopœia was issued, and doubtless strength and material are being accumulated for the composition of a new issue. For the most part, it is to be feared that the critics of the pharmacopœial work, as is the habit of their kind, are attracted more by faults than by virtues. Hence we welcome an opportunity of expressing our appreciation of the value of the sustained attention and constant preparation which are steadily supplied by the responsible committee. Especially in the present report is to be seen the value of the co-operation of the expert pharmacists whose assistance is essential on so many points. The melting point of a fat, an exact estimate of an ash percentage, a slight difference in the degree of solubility—these and other details may perhaps seem unimportant matters to the busy practitioner; but insistence on such details is an essential part of the machinery by means of which the Pharmacopœia is kept as the uniform standard and guide for the composition of medicines in the British Isles. Relaxation here would mean the risk of carelessness in other directions, and, so far from disregarding this critical work, we are refreshed by its fineness and vigour. It represents a portion of the debt which medicine owes to the art of pharmacy.

Dr. F. Roberts on Baths and Bathing.

IN his interesting address to the Balneological and Climatological Society, Dr. Frederick Roberts made some incidental references to the daily bath, which, at least among some classes, is part of the daily toilet of the Englishman. Perhaps the dominant note in his discussion of this subject is to be found in the phrase "the personal factor must not be ignored." That is the qualification which limits so many of the would-be dogmatic general rules of medical practice. There will, of course, be no difficulty in securing medical assent to the proposition that boys and girls should be educated to look upon a daily bath as a duty they owe to themselves and to society. Nor will there be hesitation in endorsing the remark that infants and young children require tender treatment in the matter of baths, and that this gentleness implies more or less warmth. But differences of opinion arise when the question of the temperature of the daily bath for the middle-aged or elderly adult is discussed, and we are particularly glad to find Dr. Roberts arguing against the virtues of the cold bath at these periods of life. For vigorous and active youth the cold tub is a valuable and

tonic discipline. Even some adults who have reached or passed middle life practise it with impunity, or even with advantage. But for most men of sedentary habits the cold tub is not suitable. It has a heroic and Spartan aspect, and, being more or less disagreeable, is often therefore argued to be virtuous. Popularly hot water is supposed to "open pores" or to "relax fibres," to use the pseudo-scientific jargon of the day, and so to provoke to "catching cold" and other evils. The question in any individual case must be settled by actual experience, but there can be no doubt that many a middle-aged man would enjoy both better health and better temper if he took a warm instead of a cold bath. Personal comfort and domestic peace often have a secret and unsuspected enemy in the chilling influence of the morning tub.

Mountain Sickness.

FOR some time there was a good deal of mystery in regard to this morbid state and the causes underlying it, and there seems little doubt that the term was applied to varying complex groups of symptoms which were largely due to other conditions than the actual elevation above the sea-level and the attending atmospheric changes. Zuntz and his pupils have recently carried out extensive observations in the laboratory and above the snow line, with a view to determine the physiological changes in the organism resulting from diminished atmospheric pressure and lessened oxygen tension, and Dr. Longstaff has lately reviewed the whole subject in an interesting monograph. After quoting the varied experiences of mountaineers as far back as A.D. 1519, he shows conclusively that the fatigue consequent on the continual and arduous work of mountain climbing forms a most important factor in the causation of mountain sickness, and probably largely accounts for the fact that the condition frequently occurs in a severe form at the comparatively low altitudes of 9,000 to 15,000 feet, altitudes which are attained by inexperienced and untrained mountaineers, and at which the atmospheric pressure is only reduced to about two-thirds, whereas the more highly trained have reached heights of over 20,000 feet, or less than half an atmosphere, without experiencing any greater inconvenience than some breathlessness on exertion and weakening of muscular power. Muscular weakness and acceleration of cardiac and respiratory rhythm, combined with anorexia and headache form the group of symptoms to which the term mountain sickness is applicable, and these appear to be caused by a deficient supply of oxygen consequent on the diminished atmospheric pressure. Experiments in the pneumatic chamber confirm the view that the condition arises from the diminished oxygen tension, and not from the low pressure of the atmosphere itself. It is, in fact, a condition of oxygen hunger. The experience of mountaineers shows that a prolonged stay at high altitudes does not lead to acclimatisation to the altered conditions, but, on the contrary, tends to a continued diminution in muscular power, and a general deterioration in health.

MEDICAL OPINION AND MOVEMENT.

THE Odontological Society of Great Britain is prepared to receive applications for grants in aid of the furtherance of scientific research in connection with dentistry. The grants expire on May 1 next following the date on which they are made. A report of the work must be furnished to the Committee of the Society by the recipient of the grant on April 20 following the allotment; and in the event of the whole expense of the inquiry being provided by the Committee, the result of the investigation shall be the property of the Society. In any case, the author shall not publish a report of the work done elsewhere than in the Transactions of the Society, except by permission of the Committee. Further particulars may be obtained on application to the Hon. Secretary, Scientific Research Committee, Odontological Society, 20 Hanover Square, W.

THE Courts of Law afford abundant evidence of the unwarrantable attacks to which members of the medical profession are continually exposed in the shape of allegations of improper treatment by dissatisfied patients or by the slanderous assertions of the hysterical. It is incumbent on the medical man to give his full attention to the exercise of his professional duties, and to display all that sympathy and kindness which the condition of his patient naturally calls forth, but he must be careful to be wary for himself and the consequences which may befall him should he fail in any way to take such precautions as would preclude the possibility of his falling into the entanglement of "legal proceedings." A rather extreme case has recently been decided by the Supreme Court of Michigan. A lad, aged seventeen, consulted a surgeon for a small tumour of the ear. At the time of his visit he was accompanied by several adult relatives—an aunt and two sisters. He submitted to an operation, and died during the administration of the anæsthetic. The father sued the doctors on the ground that his consent had not been asked. The Court naturally held that, in view of the absence of any reasons to lead the surgeon to believe that the consent of the relatives did not include that of the father, no liability was incurred by the medical men concerned.

THERE has been for some time a general consensus of opinion that the teaching of midwifery in the medical schools is inadequate, and some time ago a Committee was appointed by the General Medical Council to investigate the question and devise means of improvement. Some of the recommendations of the Committee are already carried out in most of the London schools of medicine, and there should be little difficulty in making them compulsory for all. Such is, for instance, the recommendation that the student shall not be allowed to conduct his twenty cases of labour before he has filled the post of clinical clerk and surgical dresser and has attended a course of lectures in surgery, medicine, and midwifery. But the Committee makes a further recommendation, that every student, before attending his twenty

cases of labour, must have attended a lying-in hospital for three months, or during one month have given daily attendance at a lying-in hospital or in the lying-in wards of a general hospital, and therein conducted cases of labour under the personal supervision of a medical officer of the hospital. The majority of the hospitals have unhesitatingly condemned this proposal as impracticable. Its enforcement would undoubtedly seriously handicap those hospitals which are not provided with special obstetric wards, and would add further outlay to an already expensive curriculum. There can, however, be no two opinions that the present manner in which the medical student acquires his obstetric experience and knowledge is altogether too haphazard to be efficient, and if the Committee is convinced of the necessity for this provision, means should be found to give it practical effect. It is of the greatest importance that the general practitioner should commence his professional career with a sound, practical knowledge of midwifery.

WITH the Education Bill defunct, the provision for medical inspection of the children of public elementary schools must necessarily for the time being remain in abeyance. It is at least a step in the right direction that the principle of the provision received such general support from the various political parties, but it is to be hoped that in the event of a still further protracted delay in the settlement of the education controversy some means may be found of giving practical effect to this part of the Bill. We are accustomed to regard ourselves as a nation in the foremost van of civilisation, yet we are strangely halting in our progress in these matters. In many parts of Germany the education authorities not only provide for the medical inspection of all school children, but have also called into requisition the services of the dental surgeon. Proper supervision of the children's teeth has been carried out in Strasburg since 1902 by a dental surgeon duly appointed by the city, and the German dental societies are now making strenuous efforts to force upon the attention of the authorities the importance of the proper care of the teeth, and to induce them to carry out the recommendations of the Congress of the International Dental Federation, held in August 1906. These recommendations were that the children should be taught the proper care of their teeth and the importance of a healthy, clean mouth, also that school clinics should be established where the children's teeth might receive the necessary attention and supervision. The medical profession is now fully alive to the fact that carious teeth are responsible for many disorders, often of a serious nature, and it is recognised that a healthy mouth is one of the chief essentials for a healthy body. Any medical supervision of school children, therefore, which does not include also due attention to the condition of the teeth will be defective and unsatisfactory. It is only by bringing this aspect of the matter before the notice of the authorities that we can hope to see adequate dental inspection enforced.

HOSPITAL CLINICS.

ŒSOPHAGOSCOPY.

Demonstration to Practitioners at the Central London Throat, Nose, and Ear Hospital.

By W. STUART LOW, F.R.C.S.(Eng.), Lecturer and Joint Teacher of Practical Otology, Polyclinic College.

MR. STUART LOW said that the direct examination of the œsophagus by means of straight metal tubes introduced from above and pushed along to various depths had not been systematically studied nor practised in this country. On the Continent, and more particularly in Germany, however, this matter has been gone into with the usual Teutonic energy and thoroughness, with the result that the Germans are *facile princeps* in this interesting, instructive, and invaluable field of clinical investigation. Why we should lag behind was rather difficult to explain. It might be, but if so it was quite incorrect, that œsophagoscopy was considered by British medical authorities as of little use in its practical application. Just as in the case of submarines, airships, and balloons, however, a powerful advocacy and insistence on their great practical utility in the lay press had had the result of thoroughly awakening us to the urgent necessity of adopting them, so it has become imperative that our more energetic and untrammelled medical press should perform the same freelance-like work of forcing an adequate recognition of the great importance of œsophagoscopy as an aid in diagnosis and treatment.

Mr. Stuart Low remarked that he would only say a word here on the perfect safety of direct inspection of the gullet by means of the long single tube in well-trained hands. He mentioned this particularly because there was an idea abroad among students and medical men that the method was dangerous, and he had often been questioned by his pupils as to the great risks run of perforation of the œsophagus.

Before the introduction of the single long metal inspecting tube of Mikulicz, when jointed tubes, that could be subsequently straightened, as used originally by Kelling and Stork were used, there was considerably more danger, but now the likelihood of any serious complication was reduced to a minimum in skilled and practised hands.

Killian, like his predecessor in the chair of Laryngology in the University of Freiberg, has done much to develop and popularise this method of œsophageal examination.

The best instruments at present in use are those improved by Killian—namely, the long metal tubes and special lamp fixed at the proximal end for direct illumination when the Kerstein lamp, worn on the forehead, was not being used. For class demonstration purposes direct illumination was the best, as all the members of the class could easily file past and successively look down the rigid metal tube and thus inspect the œsophageal interior. For illumination either a storage battery or the street or house current could be employed. The metal tubes vary in length from 19 to 50 cm., and in diameter from 1 to 1.5 cm. The parts of the œsophagus most com-

monly diseased are the beginning, the region of the tracheal bifurcation situated 26 cm. from the incisor teeth and the termination.

THE METHOD.

One of the most important and essential practical points in the successful carrying out of œsophagoscopy consists in the preparation of the patient. To suddenly commence the direct inspection of the œsophagus without first properly preparing the patient is only to court failure.

The clothes about the neck and chest should be freely loosened so that the neck can be straightened and the head thrown back without the patient feeling any constriction, and so that the chest can be expanded and respiration carried on quite freely.

The stomach should be empty so that the patient should not have partaken of food nor drink for some time previously to the examination. Vomiting sometimes arises, particularly when the tube comes into contact with the cardiac aperture and the stomach contents flow into the tube. These contents should be mopped out with cotton wool or sucked up by a pump. If the patient is in the horizontal position the vomited substance will be got rid of by lowering the patient's head or raising the foot of the operating table.

It may sometimes be advantageous to perform œsophagoscopy in the horizontal position on the operating table and under complete anaesthesia, but this is quite exceptional. The usual position for inspection is the sitting position, with the head efficiently supported and thrown well back, so as to straighten the passages as much as possible. Killian is very careful to cocaineise the pharynx and upper part of the œsophagus thoroughly. He does this by means of a long malleable curved wool carrier and with the wool well saturated with a 10-per-cent. solution of cocaine these mucous surfaces are again and again mopped over at intervals of ten minutes. In this way complete local anaesthesia is established, and the subsequent procedure very greatly facilitated.

When studying under Killian some months ago at Freiberg the assiduity with which he applied the cocaine previous to passing the instrument was much impressed upon me as an essential feature of his method and success, and in his clinic cocaineisation is carried out with the aid of the laryngeal mirror.

If the patient wears artificial teeth they ought to be removed, and it was pointed out at this demonstration that people with edentulous jaws were the best to commence practising upon, as the straight rigid tube can be more easily passed in the absence of the upper incisor teeth.

It is very important that œsophagoscopy should always be preceded by a very careful examination of the œsophagus with graduated bougies in order

to discover the seat of the disease and to be enabled to choose the right length of tube. Should this proceeding be negative, then the longest tube must be employed, so as to reach the cardia, and by gradually withdrawing the tube every portion of the gullet can be successively illuminated.

The metal tube having been warmed and lubricated has first passed into it a hard rubber sound obliquely rounded at the tip, and this occludes its cavity and prevents it becoming filled with saliva and mucus. The base of the tongue is gently drawn forward and downwards by means of the left hand, and with the right hand the instrument is made to glide over the tongue and epiglottis and on to the posterior wall of the pharynx. This is accomplished rather rapidly, and somewhat forcibly, and in this way the tube overcomes the normal resistance caused by the larynx pressing against the vertebral column and the contraction of the inferior constrictor of the pharynx; and usually glides on unhindered into the œsophagus. If the instrument is now directed properly, it is exceptional to encounter any marked muscular resistance. Should it become caught, however, or refuse to advance far with slight force, then the central hard rubber sound should be at once withdrawn and Casper's or Killian's lamp pushed into position and fixed over the orifice of the metal tube, and by this good illumination the tube can be kept in the centre of the lumen of the œsophagus and pushed towards the cardia with facility, should no abnormal obstruction exist. This precaution is particularly necessary should advanced carcinoma, ulceration processes, or any internal constriction or irregularity be present, to avoid perforation of the œsophageal wall. Having reached the cardiac end, the tube is then slowly and carefully withdrawn, and the receding walls systematically and successively inspected for the detection of irregularities, ulcerations, or congested spots or other departures from the normal. Should saliva and mucus occlude the view it should be mopped up by means of cotton wool or small pieces of sponge fixed on proper carriers.

In particularly difficult cases the tube is best introduced by being passed over an English woven œsophageal bougie, which is first inserted and which exactly fits the metal tube and acts as an efficient guide—this being subsequently withdrawn when the metal tube is in position.

When sufficient manipulative skill has been acquired, the patent long metal tube can be introduced right down to the cardia without the aid of either the bougie or the hard rubber sound.

The anatomical course of the œsophagus serves to explain some of the hindrances and difficulties of introduction. It is to be particularly noted that in the lower portion of the thoracic œsophagus it is situated towards the right and posteriorly, and that it is only on reaching the diaphragmatic orifice that it turns forwards and to the left.

Mr. Stuart Low demonstrated the passage of the long metal tube to the students in the case of a female patient, 65 years of age, who first came to the clinic a fortnight ago. The woman applied for relief because of difficulty in and coughing on swallowing liquids, and more particularly warm liquids. Examination of the larynx revealed complete fixation of the right vocal cord in

the cadaveric position. The voice was not at all affected, although easily tired after speaking for a short time. The absence of hoarseness was explained by the fact that the unaffected vocal cord readily passed across and approximated well to the fixed cord on vocalisation. Some hard glands could be made out on the right side in the superior deep cervical lymphatic group. The diagnosis, as revealed by the œsophagoscope, was a unilateral spot of malignant disease on the right side of the œsophagus implicating the recurrent laryngeal, and thus causing paralysis of the muscles moving the vocal cord and impairment of the sphincters of the larynx. This would also explain the greater difficulty and embarrassment in the swallowing of warm as compared with cold liquids, since the cold fluids would tend to stimulate the parietic sphincters, while the warm would not.

Another case demonstrated was also that of a female patient, aged 56, who came to the clinic complaining of loss of power to swallow solids and almost complete obstruction for liquids. Laryngological inspection showed the left vocal cord very impaired in its movements, but no other physical sign. On attempting to pass a large-sized œsophageal bougie, however, it was quite impossible to get beyond the region of the cricoid cartilage, six inches from the teeth, and the end of the bougie was found coated with blood. Inspection by means of the tube showed a ring carcinoma at the upper part of the œsophagus, and when withdrawn this could not only be plainly seen, but its surface and consistency could be made out by means of a probe passed down through the tube, and a fine india-rubber tube could be guided over the growth, and in this manner feeding carried out successfully.

Mr. Stuart Low told the class of a very important and interesting case that he had seen in Professor Killian's clinic. A woman had suffered so much pain on taking food that for some months she had been unable to eat, and in spite of much medical treatment had become very thin and lost much in weight. Inspection of the gullet by the long tube showed a very red ring of superficial ulceration near the cardia; this was mopped over every second day through the tube with a solution of silver nitrate, with the result that in a few weeks the patient was completely restored to her usual health.

Foreign bodies.—The œsophagus extends from the cricoid cartilage to the entrance into the stomach opposite the tenth dorsal vertebra. It is from nine to ten inches in length, and a little over half an inch in diameter.

There are three narrow parts in its course, one at its commencement, one $2\frac{3}{4}$ inches below that point, and a third where it passes through the diaphragm. Foreign bodies, when swallowed, are most likely to lodge at one of these natural constrictions. It is most important to remove anything lodging in this passage as soon as possible, since, if allowed to remain, a foreign body is apt to lead to ulceration that may open into adjacent parts. In this way a coin lodged in the œsophagus has caused death by ulcerating into the aorta. Removal can be best accomplished by special forceps introduced through the œsophageal tube. Mr. Stuart Low showed these forceps and demonstrated the method of using them.

THE ACTIVITY OF THE RENAL FUNCTION.

A Demonstration of the Methods Employed in its Estimation.

By J. W. THOMSON WALKER, M.B., C.M., F.R.C.S., Assistant Surgeon, North West London Hospital, and St. Peter's Hospital for Stone.

THIS demonstration was given at the Polyclinic, and indicated that the renal function should be tested in two types of cases. The first of these is where there is stricture, enlarged prostate, or a stone in a septic bladder; in such circumstances we want to determine the condition of the kidneys—whether they are able to withstand any severe operation, or, on the other hand, are so far damaged that the operation will probably turn the scale and cause death from suppression of urine.

The second type is that in which the patient has disease of one kidney, say a large pyonephrosis, and it is required to ascertain the condition of the other kidney. The question then arises whether the second kidney, that is, the one upon which the patient would have to depend, is sufficiently sound to carry on the entire renal function.

[Two kidneys were shown from a case of this nature. One kidney was represented by a large pyonephrosis, while the other kidney contained calculi. Methylene blue had been injected in this case, but was not eliminated by the affected kidney while the other organ passed it in a somewhat modified form. Nephrectomy was performed, but unfortunately the patient died from a septic condition ascending from the bladder to the remaining kidney.]

The method of testing the renal function in the first type of case is comparatively simple. All that is necessary is to give an injection of a known quantity of methylene blue, to note the time it takes for this to appear in the urine, and to estimate the total quantity eliminated. If, however, the action of one kidney has to be compared with that of the other, difficulties at once arise, because the function of each of the kidneys has to be tested separately by means of a catheter in each ureter. Some idea may be gained as to the defect of renal function on seeing the patient for the first time, although there may be very few symptoms of renal disease. One may observe dry tongue, thirst, headache, wasting, poorness of appetite, occasional vomiting, and with these, perhaps, a history of constipation. Such symptoms may be so slight as to cause little disturbance to the patient, and may be overlooked by the medical attendant. Again, the kidneys may be tender, especially in septic cases. If interference with the functions of the kidney is due to back-pressure only, the probability is that there will be no tenderness. As regards enlargement of the kidney, it is exceptional to find any enlargement from back pressure of urine—that is when the pressure is in front of the bladder. A person with enlarged prostate has very seldom an enlargement of the kidney, sufficient, at all events, to be felt through the abdominal wall.

The most reliable criterion for the activity of the renal function in surgical renal disease, apart from

the tests here to be described, is the estimation of the amount of urea present in a twenty-four hours' sample of urine. The estimation should be repeated on several different days as it is unwise to trust to one estimation. The urea is constantly diminished in renal disease. The amount of diminution, however, is not a good criterion of the amount of the destruction of the kidney.

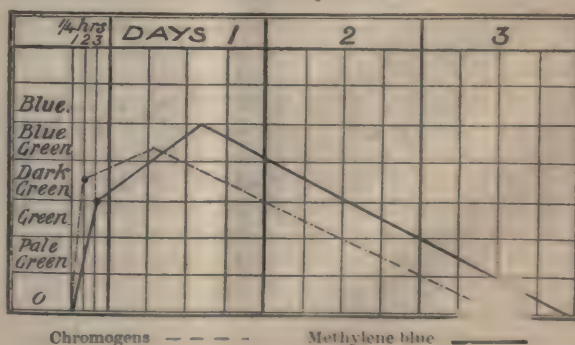
SPECIAL TESTS.

There are three principal means of estimating the renal function artificially: (1) By the injection of methylene blue intramuscularly; (2) by the injection of phloridzin; (3) by cryoscopy.

1. In the methylene blue method 15 minims of a 5 per cent. solution of methylene blue are injected into the gluteal muscles. At the end of about fifteen minutes the urine passed will be found to be clear, but on being boiled with the addition of acetic acid it becomes blue, indicating that a certain body (chromogen) is present which can be converted in this way into methylene blue. Within half an hour the urine itself becomes blue and remains of that colour for between thirty to sixty hours, or even for several days.

The following table gives the different figures connected with the methylene blue method: (1) Elimination commences in thirty minutes; (2) chromogens appear in fifteen minutes; (3) quantity of methylene blue eliminated indicated by colour—dark green or blue; (4) duration from thirty-five to sixty hours; (5) the excretion may be constant or intermittent.

In a man with enlarged prostate from one to two hours may elapse before the methylene blue can be noticed in the urine. In order to test accurately the quantity of methylene blue eliminated a rather complicated colorimetric analysis is necessary. You can, however, form a very fair estimate of the excretion of blue by looking at the urine. The normal colour is dark green or Prussian blue, and the colour is at its height in the urine within five or six hours after the injection, continues at that for twenty-four hours, and then commences to fall. The following table indicates the curves of the chromogens and of the methylene blue:—



The chromogens should be estimated along with the blue otherwise the correct total quantity passed is not obtained. In some cases where the kidneys are diseased no methylene blue is passed, and only chromogens are eliminated. In other cases neither the one nor the other appears in the urine.

2. The Phloridzin test. This test is applied by injecting five milligrams of phloridzin under the skin of the patient. In fifteen minutes to half an hour the urine will be found to react to Fehling's solution as in diabetes. And this condition continues for about two to four hours. The striking point about this form of glycosuria is that there is more sugar excreted by the kidney than can be obtained from the amount of phloridzin employed. The sugar is formed from the blood by the renal cells and passed out. The phloridzin acts as a stimulant to the formation of sugar in the renal cells which act as gland cells in the same way as the cells of the mamma in forming sugar from the blood.

The following table gives the principal data connected with the phloridzin reaction: (1) Commences in thirty minutes; (2) duration two to four hours; (3) quantity of sugar eliminated 1 to 2 grammes; (4) limits of health lowest $\frac{1}{2}$ to 1 gramme, highest 2-2.50 grammes.

The duration of the test is about two to four hours, and it has the great advantage over methylene blue that when the ureters are catheterised the catheter may be left in position until the reaction is completed. If the kidney is diseased less glycosuria is present, or there may be complete absence of elimination of sugar.

3. *Cryoscopy*.—The freezing point of a solution depends upon the density of the fluid, and this prin-

ciple has been applied as a means of measuring the density of urine. In freezing the urine the freezing point varies according to its density. Normal urine freezes at 1.3° centigrade below the freezing point of distilled water. Where the patient has had a large draught of fluid it may rise to 1° centigrade below the freezing point of distilled water. When the patient's urine is concentrated it goes down as far as 2.30° centigrade.

The following table indicates the cryoscopy figures: (1) Urine 1.30° C. to 2.20° C.; (2) polyuria in health, 1.00° C.; (3) in concentrated urine, 2.30° C.

This method is merely another method of estimating the specific gravity, and it only differs from other methods in that it takes no account of the form of the molecules. In order to get the best results it is necessary to take the cryoscopy of the blood so as to get a balance between the freezing point of the blood and that of the urine. The most important observations are made by that comparison. The blood itself is constant in health. It is kept constant in density by the action of the kidneys, assisted by the sweat glands and the lungs, so that if the kidneys are acting badly a change will be got in the freezing point of the blood. When the kidneys are not acting the blood becomes denser and the freezing point gets lower. The constant freezing point of the blood is 0.56° C., and tables may be made out according to that. In many cases where other symptoms of renal disease are absent, and where the specific gravity and other tests fail, a comparison of the freezing points of the urine and the blood has indicated disease, and thus demonstrated the value of this method of observation.

THE RATIONAL USE OF DISINFECTANTS.

By THOMAS DIVINE, M.D., C.M.(Glasg.), D.P.H. (Camb. and Lond.), F.C.S., Fellow Roy. Inst. Pub. Health.

MEDICAL science in various ways attempts to combat our unseen foes, the ubiquitous bacilli; but whatever means of prophylaxis against disease be adopted, the need for efficient chemical disinfection will always exist. Chemical disinfection, therefore, must always take a high place among those measures to be employed against infection, both by the individual and by the community—by the citizen and by the health authorities. It is unfortunate that the conceptions of what constitutes infection and disinfection are still very chaotic. This state of affairs is due to the survival of antiquated and discredited notions, which imply that where the nose is not offended no danger exists. Modern bacteriological research has finally disposed of the fancy that infection is of the nature of a miasma, and has taught us to look upon it as due to a living entity—a micro-organism. The scientific conception of disinfection implies that the organism must be killed outright, and any agent which cannot thus kill the organism is no true disinfectant.

Heat, under certain definite conditions, can be depended upon as an efficient practical disinfectant.

Whenever possible, infected clothing, fabrics, and such articles as will not spoil in water, should be disinfected either by prolonged boiling in water (preferably with some germicide of known efficiency), or by exposure in a steam disinfecter under suitable physical conditions, and for a reasonable period of time. The modern tendency is towards the installation of apparatus giving saturated steam under pressure, as in the well-known Equifex. This is undoubtedly a move in the right direction, and a good disinfecter of this type, even if the initial cost is high, is a necessity, and in the end an economy, in the equipment of a sanitary authority. As opposed to this, it may be safely affirmed that no kind of aerial disinfection can be absolutely depended upon. Koch, as long ago as 1881, showed the utter futility of pretending to disinfect with sulphur dioxide, either in the dry or moist condition, and the use of this agent has long been discarded on the Continent. More recently some authorities have pinned their faith to disinfection by formaline gas; but this, too, is untrustworthy against all but the least resistant organisms. Preparations of many chemical substances, such as permanganate of potassium,

eucalyptus, thymol, boric acid, chloride of lime, and a host of proprietary articles, are erroneously believed by the public to be disinfectants. Some of them have the power of removing foul odours, or even in some measure of inhibiting bacterial multiplication, but these qualifications in no sense entitle them to be called disinfectants. They are at best nothing more than deodorants or antiseptics, and consequently their employment as disinfectants means a waste of money, and, what is even more to be regretted, tends to create a false sense of security.

In practice it is found that disinfection, apart from heat, is best accomplished by chemical agents of known efficiency and in solutions or suspensions of definite strength. In such a method contact is rapid, intimate, and certain, and the process tends to prevent dust rising to contaminate the surrounding atmosphere. But if disinfection by any chemical solution is to be a fact and not a farce, regard must be had to the special object in view. The power of each agent is not constant for different organisms; nor even for the same organism under different conditions.

The urgent need, therefore, of some means of "standardising" those chemical agents which are most frequently employed for the purpose of disinfection, is manifest, in the interest both of the public health and of municipal economy. By means of the Rideal-Walker method of standardising disinfectants we can now with certainty separate the efficient from the untrustworthy, the real from the spurious; and can award a figure of merit to each disinfectant in terms of a standard such as absolute phenol. Let us take, for example, two such well-known and largely used disinfectants as perchloride of mercury and the most active commercial carbolic acid, when tested against that common organism the typhoid bacillus. Regarding carbolic acid as the "standard," we find that the germicidal action of perchloride of mercury against the typhoid bacillus (the conditions in each case being the same), is 20 times as great as carbolic. In other words, the carbolic acid co-efficient of perchloride of mercury is 20. The cost of disinfecting by carbolic acid on the ordinary commercial price is 1s. per gallon, but the equivalent of this disinfecting power, as obtained by perchloride of mercury, would, on the same basis, be 1s. 3d. It will therefore be seen that this matter of efficiency and economy is one of no small importance. The need of some guarantee of the germicidal power of disinfectants will be apparent; and our contention is that it is desirable that the Legislature should call for a guarantee on all preparations which are sold to the public as disinfectants.

There are but few disinfecting substances on the market to which any guarantee in definite and scientific terms is attached. Such a guarantee attaches to the disinfectants prepared by Jeyes' Company, and more recently to the Izal of Newton, Chambers and Co., and to various preparations (Bactox, Sanitas, etc.) of the "Sanitas" Company. This is as it should be. For example, the well-known compound prepared by Jeyes' Company from certain members of a new series of oxidised hydrocarbons and sold under the

name of Cyllin is guaranteed to be at least ten times less toxic than carbolic acid, and to have co-efficients, in terms of carbolic acid (absolute phenol), ranging from 10 to 30 for different micro-organisms. Thus against the common staphylococcus pyogenes aureus, Klein found the co-efficient of Cyllin to be 9.3; Firth and Rideal, and also Dunbar and Kister, found the co-efficient against the typhoid bacillus to be 11 (and since their work on this organism Messrs. Jeyes have succeeded in raising the co-efficient to 14); whilst Simpson and Hewlett give Cyllin the remarkable co-efficient of 35 against the bacillus pestis. It is not our present purpose to single out any particular germicide, but the scientific work performed with Cyllin alone illustrates the position we wish to take up—namely, that in the interest of public health, of efficiency, and of municipal economy, it is essential that regard must be had to the true germicidal power of any disinfectant employed. The Rideal-Walker method of standardising disinfectants can be applied to any disinfectant, and the appropriate figure of merit applied. When this is done one can by simple calculation rate the monetary cost of any germicide, and so have cost and efficiency placed side by side. In the case of Cyllin, for example, 3d. will purchase the germicidal power of 1s. worth of carbolic acid or 3s. 2d. worth of Lysol.

It is satisfactory to be able to record the fact that a score at least of the sanitary authorities in England and Wales are alive to the importance of having a definite guarantee as to the actual germicidal strength of the disinfectants they purchase with public moneys. We believe that the first public body in this country to insist on such a guarantee in connection with disinfectants was the Chelsea Borough Council.

We should like to see the co-efficient clause of the Metropolitan Borough of Islington (taken from the tender form, 1906) adopted by every municipality in this country: "Any disinfectant fluid may be tendered for provided that its bacteriological efficiency is expressed in terms of absolute phenol (100 per cent.) as determined by the Rideal-Walker method, when working with vigorous cultures of *B. typhosus*, and that it is miscible with water. The co-efficient must be given in the blank space left for the purpose."

There are many proprietary disinfectant substances capable, no doubt, of doing real service in disinfection when employed in suitable strength, but there are others which are quite useless; and the application of the Rideal-Walker figure of merit will place them at once on their proper plane of efficiency. But, until this is done, or until the Legislature steps in and demands a definite specification, neither private buyers nor public authorities have any effective control over the disinfectants they employ, and for all practical purposes they may be, and often are, buying and using disinfectants that will not disinfect.

In no other way can efficiency and substantial economy in our municipal expenditure on disinfectants be effected and a really rational system of chemical disinfection become established. We look to our health authorities all over the country to set

their houses in order in this respect. They have officers who, by reason of their scientific training and experience, are capable of appreciating at their true worth the claims advanced for any disinfectant. It

is by their medical officers of health, that local authorities should, in our opinion, be guided in the selection of disinfectants to be used on behalf of the community and of the public health.

PRACTICAL NOTES ON DIAGNOSIS AND TREATMENT.

Idiosyncrasy to Potassium Iodide.

WITH patients who have a specific idiosyncrasy against potassium iodide this may often be minimised by combining the drug with aromatic spirits of ammonia and a quinine preparation, and by administering it in considerable quantities of water.
Sir Felix Semon.

Pustular Eczema of the Hands.

IN this condition I get the best results with ammoniated mercury ointment (half the official strength) as a local application and carbonate of iron internally.—*Mr. Shield.*

Picrotoxine in Night-Sweats.

PICROTOXINE is useful in the night sweats of phthisis and more particularly in the later stages of the disease. It is then often more efficacious than atropine. It may be given in granules each containing $\frac{1}{100}$ grain. Two to four of these may be given daily and the treatment continued for several days.

Capillary Pulsation.

THIS may be well observed through a glass slide pressed gently against the lip. It is a characteristic incident in the course of aortic regurgitation, but it is also often well seen in anæmia and in convalescence from acute febrile disorders.—*Dr. J. S. Bristowe.*

Pyo-Salpinx without Pyrexia.

YOU may have a considerable pyo-salpinx with a normal temperature. I have seen a case in which one tube contained 4 oz. and the other 5 oz. of pus, and yet the temperature was normal. On the other hand, with a very limited amount of purulent fluid there may be a decidedly hectic temperature.—*Dr. Handfield-Jones.*

Hæmoptysis in Phthisis.

HÆMORRHAGE occurring in phthisis is very liable to be followed by an increase of the tuberculous disease either in the same or in other districts of the lung. This is probably due to fresh infection by means of the inhaled blood, containing as it does the tubercle bacilli.—*Dr. Green.*

Pneumonia in Childhood.

PNEUMONIA in children is sometimes a very obscure disease, as the physical signs are apt to be delayed, incomplete, or uncertain. The child is flushed, with hot, dry skin, rapid pulse and respiration, and a high temperature. Even so late as the second or third day there are frequently no distinctive physical signs. Sometimes as early as the fourth or fifth day, without any physical signs having appeared, the fever terminates by crisis, and you thus get the assurance that the disease is lobar pneumonia.—*Dr. Sturgess*

Sciatica.

A CASE is reported in which complete relief followed the use of nitroglycerine after many other remedies had proved of no avail. The drug was given in a 1 per cent. alcoholic solution, of which one, gradually increased to 5 minims were given thrice daily.

Appropriate Vehicles for Individual Drugs.

CERTAIN drugs always give better results when administered in certain vehicles. My experience has led me to believe that potassium iodide acts most effectually when given in the compound decoction of sarsaparilla, and a small quantity of quinine, when presented in the form of Warburg's tincture, has a far greater effect than when given in the solid form, or in an ordinary solution.—*Mr. Malcolm Morris.*

Leeching in Cyanosis.

WITH marked distress of breathing and increasing cyanosis, such as are apt to develop in children when attacked by bronchitis, leeching is of great value. At least five or six leeches should be applied.

Empyema.

IN empyema I think mere aspiration is waste of time, and that, as soon as we have found by the exploring needle that pus exists, a complete opening should be made to give a channel for the escape of the pus, and for the prevention of reaccumulation.—*Dr. Gilbert Smith.*

Alopecia Areata.

AS a rule cases of alopecia areata end in recovery and treatment is not a matter of much consequence except to encourage the patient. I, as a rule, order oil of turpentine to be rubbed into the scalp, and this acts as a rubefacient. Of course, if the patient's health is bad, this must receive attention. Some cases do not recover until after many years.—*Dr. Carafy.*

The Knee-Jerk in Functional Disease.

IN neurasthenia and hysteria there is apt to be considerable exaggeration of the knee-jerk. On the other hand, it should never be concluded that hysteria is a satisfactory explanation of an absent knee-jerk.

Treatment of Irritable Ulcer.

ABOUT the inner ankle particularly we are apt to have a small irritable ulcer which is excruciatingly painful, keeps the patient awake at night, and leads to great irritation. If on examining the ulcer with a probe there is one point at which the patient cries out, the best thing is to snip away the granulation at this point with a pair of scissors. Otherwise nitrate of silver solution (2 grains to the ounce), applied on lint and covered with a wet dressing, is the best application. But in addition opium must be given internally.—*Mr. Christopher Heath.*

SOME NEW LOCAL ANÆSTHETICS.

Alypin.

THIS drug, one of a group of local anæsthetics analogous in their mode of application to cocaine, is the hydrochlorate of benzoyl 1-3 tetramethyl-diamino 2 ethyl-isopropyl alcohol. It is a white crystalline powder, very soluble in water, and not precipitated in weak alkaline solutions, nor altered by boiling.

Mucous Membranes.—A 10 per cent. solution in water has been successfully used for local application in operations about the throat and nose.

Minor Operations and Dental Surgery.—For this work subcutaneous injections of 0.5 to 1.5 c.c. of a 2 or 3 per cent. solution are recommended, but it is pointed out that there may be considerable irritation and destruction of tissue at the site of injection with even so dilute a solution as 5 per cent.

Spinal Anæsthesia has been satisfactorily produced without unpleasant symptoms by the intraspinal injection in the lumbar region of a 3 per cent. solution to the amount of 5 c.c., permitting of the majority of operations below the level of the umbilicus.

Ophthalmic Surgery.—In this department particularly alypin is found to provide a non-irritating, rapid, conjunctival and corneal anæsthetic; the strength advocated for instillation in the eye is from 2 to 10 per cent. It does not affect the cornea and has no effect on the pupil or accommodation.

Novocain.

Novocain is the monochlorhydrate of para-amino-benzoyl-diethyl-amino-ethynol, and is freely soluble in water (1 in 1) and in alcohol (1 in 30), the aqueous solution having the great advantage, that it can be boiled without decomposing. Even in concentrated solutions its injection does not cause local irritation and its toxicity is slight.

Mucous Membranes.—It is frequently employed for operations on mucous surfaces, particularly as a prelude to the intra-urethral application of silver nitrate in urethritis, in 5 to 10, or even 20 per cent. solutions, and may be combined with 1 in 1,000 suprarenal solution.

Minor Operations.—For subcutaneous injection solutions of 0.25 to 2 per cent. may be used without any ill effects from absorption or local irritation.

Spinal Anæsthesia.—As an intraspinal injection 2 or 3 c.c. of 5 per cent., or 1.25 to 1.8 c.c. of a 10 per cent. solution, combined with suprarenal solution, have been found very satisfactory and attended by no disagreeable symptoms.

Ophthalmic Surgery.—Novocain has the great advantage when instilled into the conjunctiva (2 to 10 per cent. solution) of causing rapid anæsthesia without mydriasis, and it may be combined in this case also with suprarenal solution, thus presenting an almost ideal anæsthetic for ophthalmic work.

Dental Surgery.—Here a solution of 1 or 2 per cent. is usually found sufficient, and the effects very satisfactory.

Stovain.

The hydrochlorate of dimethylamino-benzoyl-dimethyl-ethyl carbinol is another of the several recently discovered local anæsthetics. Although freely soluble in water the solution has the disadvantage of being acid in reaction, and therefore easily precipitated when brought into contact with weak alkaline fluids such as the body tissues contain. It has certain toxic effects: violent headache, giddiness, nausea, and vomiting, but these seem to be chiefly observed in lumbar anæsthesia in pregnant women, to whom Chartier has administered the drug by spinal injection to stimulate uterine contraction while diminishing its painfulness. These labour-inducing properties should be borne in mind.

Minor Surgery.—Local injections for surgical operations may be made with 0.5 to 1 per cent. solutions in doses not exceeding 2 grains of stovain: upon intact mucous membranes it is practically inert.

Spinal Anæsthesia.—In this, however, it plays a most important part; the injection takes the form of a 10 per cent. solution, of which 3 to 7 c.c. will in five to eight minutes induce an anæsthesia lasting from one to eight hours—a longer period than can be secured with any other intraspinal injection.

In Ophthalmic Surgery stovain proves useful for subcutaneous or subconjunctival injection, but not so for mere instillation, where it is quite ineffective.

Dental Operations may be painlessly carried out by the injection of 2 c.c. of a 0.75 or 1 per cent. solution into the gums, but it is not recommended for difficult or forcible extractions. Stovain has many incompatibles—notably alkalis, many mercurial compounds, iodine, and the iodides.

Morphia-Scopolamine.

To a different chemical category, but with a similar clinical application, belongs the intra-spinal injection of scopolamine hydrobromide combined with morphia for inducing anæsthesia. The method undoubtedly has many advantages, but its drawbacks are the length of time which elapses between the injection and the establishment of anæsthesia (1½-2 hours), and it is not free from uncertainty and danger, but in many thousands of administrations the mishaps have been few and far between.

The solutions should always be freshly prepared and carefully sterilised, small repeated doses should be given (scopolamine gr. $\frac{1}{16}$, morphia gr. $\frac{1}{8}$), beginning an hour before the intended operation, one to three injections perhaps being required.

The method is dangerous in children and in adults with heart or kidney disease; in addition to surgical operations the spinal injections have proved beneficial in violent spasmodic contractions of the uterus during labour and in nervous women, also for cystoscopic and urethral examinations. It is recommended by some authorities for the pains of tabes and in cases of inoperable tumours, while it has a marked influence upon the symptoms of paralysis agitans, although, unfortunately, its effect lasts only some twelve hours.

Tropacocain.

The hydrochlorate of tropacocain appears so far to hold its own in the field of spinal anæsthesia.

It is almost completely innocuous even in large doses and in concentrated solution: debility, old age, and arterio-sclerosis do not contra-indicate its use, although it is generally agreed that it should not be employed in patients who have not reached the age of puberty.

Spinal Anæsthesia.—The dosage for spinal injection is 0.05 to 0.08 grain in 2 per cent. solution, gradually increasing if necessary until complete anæsthesia ensues. The method is particularly applicable for operations on the lower limbs and external genitals, including the vagina and uterus,

provided the peritoneum is not opened. With extensive pelvic adhesions it is not advisable to make use of spinal anæsthesia, and the Trendelenburg position may involve the danger of the tropacocain spreading into the upper parts of the spinal cord. Decrepit subjects whose condition forbids the use of general anæsthetics by the inhalation method bear the spinal injection well.

Dental Surgery.—In dental practice very good results have been obtained by local injection of tropacocain.

Veterinary Practice.—Both experimentally and in actual surgical operations on animals tropacocain has been successfully employed by the intraspinal method.

REMEDIES AND THEIR USES.

Cardiac Tonics.

REGARDED from one point of view no class of drugs are more certain in their beneficent effect than those employed to strengthen and slow the beat of the heart, but from another point of view no class is less certain in its action or more elusive chemically. The apparent paradox is explained by the fact that whereas the active principles of digitalis and its allies are most potent and certain in their action, the pharmacopœial preparations are liable to vary considerably in strength and composition, and pharmacologists are not yet absolutely decided as to the relative values of their various constituents. According to some recent experiments by Kakowski¹ the most typical results on the excised mammalian heart are obtained when fresh preparations of the digitalis leaves are used, the various glucosides (digitoxin, digitalin, and digitalein) giving a similar but not such a complete result. It is now generally held that digitoxin is the most important and active glucoside, and, considering the great variability of the infusion, the use of a pure drug, especially if it can be kept conveniently without decomposition, presents enormous advantages from the clinical point of view. Merck has succeeded in preparing a pure crystalline preparation of digitoxin, which has all the therapeutic properties of digitalis leaves, but it is very insoluble in water. The aqueous extract of the leaves, however, appears to contain digitoxin in some soluble form, and Cloetta has recently claimed by a somewhat elaborate process to have succeeded in preparing this soluble digitoxin in a pure form. The preparation, which is known as

Digalen,

is an amorphous white powder, supplied in aqueous solution; 25 per cent. glycerine is added to the solution, which is sent out in small bottles. Each cubic centimetre contains .3 milligramme of digitalin, and a graduated pipette is supplied with each bottle to facilitate dosage. The maximum dose is said to be 4 c.c., and the ordinary adult dose 1 c.c. of the solution (17 minims). It is manufac-

tured by Hoffmann, La Roche and Company, of Basel. Freund considers this the best digitalis preparation on the market. It can owing to its solubility be given intravenously—an operation which is generally not difficult after a little practice. He has not observed the unpleasant effects (nausea, vomiting, diarrhœa) sometimes occurring after digitalis is given by the mouth, and thinks that the more serious symptoms of cardiac arrest—dyspnoea and convulsions—are not to be feared owing to the non-cumulative action of digalen. He has found it particularly valuable in asthma, its action being very prompt. Vlach² considers it a good preparation, and finds that it only fails in a few cases, where digitalis in any form is useless. The maximum dose he puts at 1 c.c. daily. He thinks that administration by the mouth is the best method, unless the drug is badly borne by the stomach. Vlach believes that a cumulative action may occur. Weinberger³ employs digalen in 1 c.c. doses two or three times daily. Intravenously he gives 2-5 c.c. He points out the value of the drug when an immediate and powerful effect is desired. Hochheimer⁴ calls attention to the fact, noted also by others, that digalen if used subcutaneously causes considerable pain and infiltration, in this was resembling crystalline digitoxin. It may, however, be necessary to use this method if the drug is not tolerated by the stomach. By the mouth he gives it mixed with peppermint water, while Grassmann advises a little syrup or sweet wine as a vehicle. The latter author thinks digalen well tolerated as a rule even by those whose stomachs are easily upset. All observers agree that digalen is a powerful diuretic, but if it is desired to increase this effect it may be combined with 1 gramme (15 grains) of diuretin. Hersig⁵ has compared the leucocytosis produced by the various digitalis compounds, and finds digalen and amorphous digitonin give more or less marked leucocytosis during twenty-four hours, but that with digitalin this reaction was very slight, and with crystalline digitonin absent.

¹ *Archiv. Intern. de Pharm. et de Thérap.*, xv., 1903.

² *Thérap. Monastretsch*, xix., 12, 1905.

³ *Prague M. W.*, xxxi., 4, 1906.

⁴ *Centraibl. f. Innere. Med.* xxvi., 27, 905. ⁵ *Ibid.*, 22, 1905. ⁶ *Arch. f. Exper. Path. a. Pharm.*, lii., 2, p. 177. 1905.

THE BOOK WORLD OF MEDICINE AND SCIENCE.

THE OTHER SIDE OF THE LANTERN: AN ACCOUNT OF A COMMONPLACE TOUR ROUND THE WORLD. By Sir **FREDERICK TREVES**, Bart., G.C.V.O., C.B., LL.D., Sergeant-Surgeon to H.M. the King, Surgeon-in-Ordinary to H.R.H. the Prince of Wales, Author of "The Tales of a Field Hospital." With forty illustrations from photographs. Popular edition. (London: Cassell and Company. 6s.)

THE tour is not commonplace. There are few books of travel in which scenes are described and figures depicted with such startling vividness as in this volume. Travellers' tales are sometimes tedious, frequently even ugly and indistinct. In this work the passion, opinion, and ambition of our fellow-men in different parts of the globe are interspersed with descriptions of interesting facts delightfully portrayed. It is not everybody who has had the happy chance of finding material for such a work, and it is fortunate that fate has so favoured the readers that such an opportunity should have been taken advantage of by Sir Frederick Treves. Fluency of style, sound reasoning, easy wit, cynical comparisons, full material, and a blending of the whole with the tact of the biographer and the eye of the artist, bespeak the writer with all his individuality of character and human interests. Now and again he gives us a touch of the spirit of cynicism, almost Scottish in its causticity. His comparisons are characteristic, as, for instance, when he compares an ironclad in the Bay of Gibraltar to "a half-submerged gasometer, with the skeleton of an ironfoundry erected on its sullen dome." The book is written in a patriotic spirit all the way through, and while he is describing the beauties and charms of foreign lands on the other side of the lantern, he is not unmindful of home, but constantly turns homeward, like a patriot, with a kindly and genial comparison.

THE PUERPERIUM, OR THE MANAGEMENT OF THE LYING-IN WOMAN AND NEWBORN INFANT. By **C. NEPEAN LONGRIDGE**, M.D., Ch.B.(Vic.), F.R.C.S.(Eng.), M.R.C.P.(Lond.), Pathologist and Registrar, late Resident Medical Officer, at Queen Charlotte's Lying-in Hospital. (London: Adlard and Son.)

Books of this description are produced in such rapid succession that one must necessarily conclude that they contain precious information for which the demand is large and sustained. Dr. Longridge has produced a work which will prove of great service to the student-practitioner just emerging from the classical realms of studentship into the more plebeian and humdrum work of general practice. Many of his idols will be shattered here. His faith in himself and in human nature will become tremulous. In such periods of emotion he will find great comfort from the thoroughly clear and practical and kindly advice placed within his reach in the volume before us. The care and skill which a practitioner shows in guiding his patients through the puerperal period will probably be the keystone of his future success, and it is by attention to matters of detail, brought into prominence and impressed upon his readers by the author of this important work, that prosperity can be achieved.

THE EARLY LIFE OF SIR THOMAS BROWNE.

THE recently issued volume of the Transactions of the Norfolk and Norwich Archaeological Society (Vol. XVI., 1906, pp. 132-146) contains an interesting contribution by Mr. Charles Williams, F.R.C.S.E., relating to Sir Thomas Browne, author of "An Inquiry into Vulgar Errors," "Religio Medici," and "Urn Burial." Mr. Williams prints the will of Thomas Browne, father of the

great Norwich physician, and reproduces a curious portrait group of the Browne family, the original of which is in Devonshire House, Piccadilly. The group shows father, mother, and three daughters, with Thomas, about the age of three, sitting on his mother's knee nursing a black rabbit. Thomas Browne the elder was himself the son of Thomas of Upton, near Chester, and of his wife Elizabeth, daughter of Henry Birkenhead, of Huxley, Cheshire. The father of the physician was the third son, and carried on business as a mercer in the parish of St. Michael-le-Querne, Cornhill. He married Anne, the daughter of Paul Garraway, of Lewes, by whom he had three daughters, of whom nothing more is known, and the one son, Thomas. It is curious that Sir Thomas, in that part of his correspondence which has been hitherto published, makes no allusion to any member of his family, but as many letters still remain unpublished in the Rawlinson and Sloane collections at the British Museum, some information may still be forthcoming in addition to the interesting facts which Mr. Charles Williams has been so successful in obtaining. Thomas Browne was eight years old when his father died in 1613, and he entered Winchester College on August 20, 1616, in his eleventh year, his name standing sixth on the roll of scholars. He stayed at Winchester for seven years, till his scholarship lapsed on the completion of his eighteenth year, and he probably spent his holidays with his mother, who continued to live in Cheapside. It is necessary to emphasise this, as an ill-natured story has found credence that Anne Browne, after the death of her first husband, repudiated her children—turned them out of doors "helpless and unprotected"—on her marriage with Sir Thomas Dutton, of Isleworth. On leaving Winchester Thomas Browne entered as a Fellow Commoner at Broadgates Hall, Oxford, matriculating December 5, 1623, the year before the Hall was incorporated as Pembroke College. On the occasion of the conversion of Broadgates Hall to Pembroke College on August 5, 1625, Browne, as the Senior Fellow Commoner, was called upon to deliver the first of the three Latin orations. The oration has been preserved, and Mr. Charles Williams has published an excellent translation of it into English, by Professor E. von B. Bensly. At the end of six years of college life Browne took his Master of Arts degree on June 11, 1629, and after travelling for four years in France, Spain, Holland, and Italy, where he took the degree of Doctor of Medicine, he settled at Shilden Dale, a remote spot on the hillside three miles from Halifax, to recruit from the perils and fatigues through which he had passed. In this tranquil retreat he wrote his famous tract, "Religio Medici," and having stayed there during the years 1634 and 1635, he finally moved to Norwich in 1636, where he practised medicine with great success for forty-six years. All who love Sir Thomas Browne and his works—and they increase in number yearly—will feel under a debt of gratitude to Mr. Charles Williams for the present paper. It clears up for ever the imputations which have too long rested on Anne Browne. The author shows how these arose, and that they obtained currency by the carelessness, to use no stronger word, of no less a person than Dr. Samuel Johnson, who prefixed a life of the author to his edition of the "Christian Morals" published in 1756.

BOOKS RECEIVED.

THE F. A. DAVIS CO., PHILADELPHIA.

"Materia Medica and Therapeutics." 6th edition. By Dr. Shoemaker.

BAILLIÈRE, TINDALL AND COX.

"Aids to Medical Diagnosis." By A. J. Whiting, M.D.

CASSELL AND CO., LTD.

"Tumours, Innocent and Malignant." 4th edition. By J. Bland Sutton, F.R.C.S.

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

CURRENT HOSPITAL TOPICS.

Bolingbroke Hospital.

THE Rev. Canon Erskine Clarke, the chairman and also the founder of this hospital, has issued an urgent appeal for £14,000 to complete the Building Fund for the new wards, the foundation-stone of which was laid in May last by H.R.H. the Princess Royal. Canon Clarke states that the present accommodation is totally inadequate, and serious cases frequently have to be refused admission because there is no room to receive them. When completed the new hospital will contain 153 beds, and the necessity for the present enlargement has been very forcibly impressed upon the Governors by the Committee of King Edward's Hospital Fund, who have subscribed generously towards it. The sum urgently needed is £14,000, and there ought to be no difficulty in raising this without delay. The hospital is situated in one of the most densely populated and poorest districts of South-west London, where a modern and up-to-date general hospital is undoubtedly required. Contributions should be sent to the Secretary of the Building Committee at the hospital, Wandsworth Common, S.W.

Colonial Contrasts.

AN incident occurred at a recent meeting of the Hobart General Hospital which reads strangely to a resident in the old country. A bequest of £1,600 had been left to the hospital by Amy Ball, but the will was disputed by the relatives, and a compromise was effected through the Solicitor-General, as a result of which the hospital received £800 only. After an explanation by the Chairman, in the course of which he stated that the Premier had promised to bring the matter before the Executive, the Mayor expressed doubts as to the legality of the proceedings, and urged that the hospital should obtain a written recommendation from the Solicitor-General to accept the course mentioned and the Premier's written confirmation of this procedure. That would, he thought, place the matter on a business footing. The Mayor assured the meeting that if the Premier confirmed the advice of the Solicitor-General he would be quite ready to agree to what had been done. Thereupon the chairman, whilst complimenting the Mayor upon the efficient discharge of a public duty, explained that the compromise had been arrived at after months of negotiations by a special committee in full consultation with the Solicitor-General, and that the judge had signed the order embodying the

compromise, which could not be upset. The life of a Premier is not invariably a happy one, but if he is to have the care of all the details of the financial work of the hospitals thrust on his shoulders, we imagine there are few men who would consent to hold the position long, even in a British Colony.

Hospital Saturday Fund.

THE *Hospital Saturday Fund Journal* is largely taken up with matters relating to the resignation of Mr. W. G. Bunn, the organisation of the office, and the appointment of new secretaries. We are glad to mark that the warmest testimony was paid by Sir Savile Crossley, chairman, Mr. R. B. D. Acland, K.C., who has done so much for the Hospital Saturday Fund, Dr. T. D. Lister, and by many members of the Council, and the members of the official staff of the Fund. For seventeen years Mr. Bunn rendered devoted service to the Hospital Saturday movement, and he has well deserved this praise and recognition. The Board of delegates have decided to present to Mr. Bunn a testimonial, to consist of a purse of money and an illuminated address. Contributions may be sent to Mr. A. W. Davies, 54 Gray's Inn Road, W.C. The testimonial will be presented at the annual dinner of the Fund to be held shortly. The official staff, in expressing their good wishes for his welfare in the future, presented Mr. Bunn, on leaving, with a clock as a token of their esteem and affection. Mr. William Jolly, after seventeen years' service, has resigned his post as assistant organising secretary, owing to advanced age, and has received a gratuity from the Board on his retirement. Mr. W. H. Reed is now the assistant organising secretary. Mr. E. Radford has been appointed organising secretary, having been selected from 75 applicants for the post. We have further to record the resignation of Mr. W. V. Stratford, chairman of the Collection Committee of the Fund, after 25 years' zealous service in various positions, which Mr. Stratford describes as the happiest part of his life. Mr. Stratford's resignation was accepted with the deepest sorrow and regret by his colleagues, for his work had called forth the admiration of every member of the Southwark Committee of which he was honorary local secretary. The Hospital Saturday Fund, apart altogether from the money it has raised for the hospitals, has done a very real service by arousing the interest of a large and increasing number of men and women, who have devoted their leisure to the work of helping the hospitals. We are glad to learn that it is hoped the amount collected by this Fund for the current year will be the largest on record.

THE PARK HOSPITAL FOR INFECTIOUS DISEASES, READING.

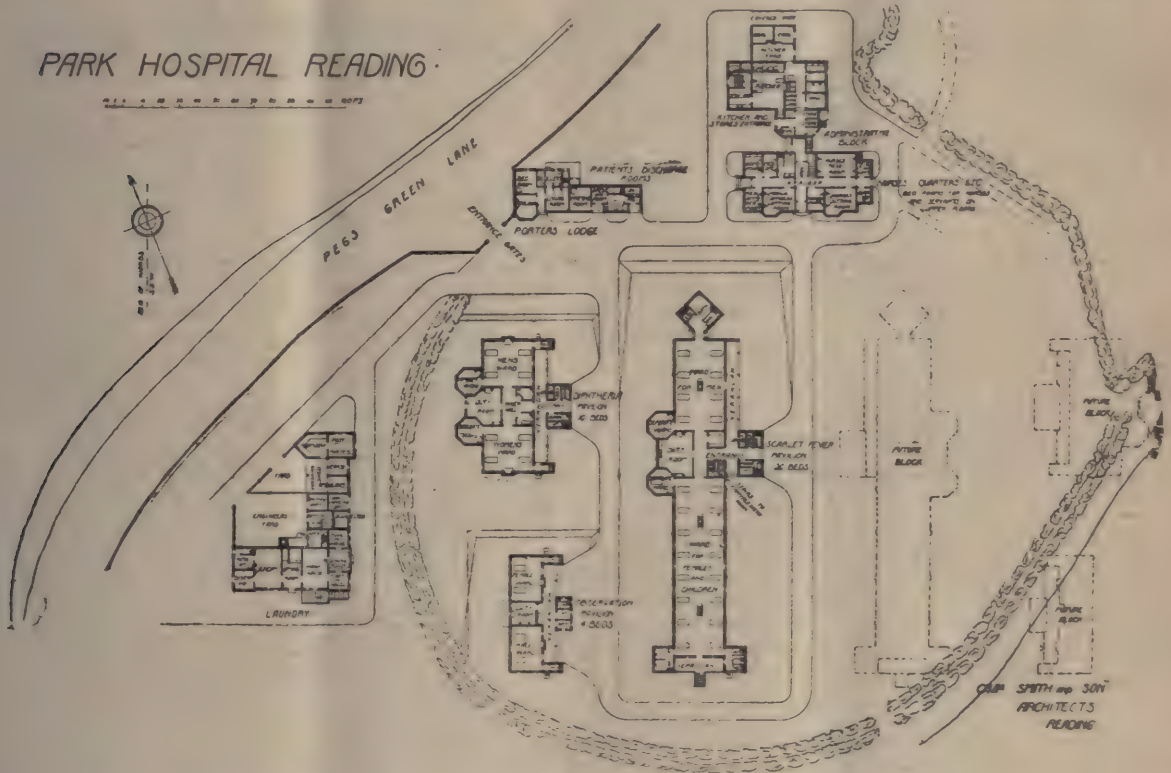
SOME time since a site of ten acres, situate to the north-west of Prospect Park, was obtained for building purposes, and the hospital was practically completed by the end of 1906, and was opened during the summer of 1906. Being only two miles west of the Reading Town Hall, it is within easy distance of the districts from which its patients will chiefly be drawn. The site is a fine one, sloping towards the south, and it lies over the lower eocene formation. It is entered from Pegs Green Lane at the western end of Tilehurst Road.

On passing the gates, the porter's lodge, containing four rooms, is seen on the left hand. Attached to the lodge, but having a separate entrance, is the discharging block,

scarlet fever, one for diphtheria, and one for observation of doubtful cases. All these blocks are placed on the western side of the main central road, and space is thus left for three similar symmetrically-placed pavilions on the eastern side. The pavilions are arranged with their long axes running north-north-east and south-south-west, and this arrangement ensures a large amount of sunshine for the wards.

The scarlet fever pavilion is by far the largest of the three. It is divided into two unequal parts by the entrance hall and the nurses' duty-room; and over this part of the block is a convalescent-room. To the south is the ward for women and children. It contains sixteen beds. At

PARK HOSPITAL READING.



which is fitted up with a bath, and has dressing-rooms and a waiting-room.

To the east is the administrative block, which includes the kitchen department and the residences for the staff. The kitchen is fitted up with Barford and Perkins apparatus for cooking by steam, and there are also coal and gas ranges.

The residential part of the block is three stories high. On the ground floor are the medical officers' rooms, matron's rooms, nurses' mess-rooms and sitting-rooms, dispensary, etc. The first floor is chiefly given up to sleeping accommodation for the nursing staff, and the second floor for the domestics. The whole of this department, as also the laundry, is large enough for a much higher number of patients than can be taken in at present; but when further room is wanted it will only be necessary to build the blocks for the additional number of beds, and, of course, this is the principle on which all such hospitals should be erected. It may at first make the cost per bed seem rather high; but, in the end, it saves money.

The hospital proper consists of three blocks: one for

the end are the closets and baths, and between the projections for these is a verandah. Between the ward and the nurses' duty-room is a single-bedded ward which runs out considerably beyond the line of the wards, and is thus provided with cross-ventilation. The male ward is to the north. It contains eight beds, and has a single-bedded ward similar to the one on the female side. The sanitary annexe projects from the extreme end of this ward; and we like this arrangement better than the one on the female side; but in both cases there are cross-ventilated passages. A verandah runs along the eastern side of the male ward, and it is deserving of notice that the glass roof of this verandah is placed lower than the top section of the windows, by which arrangement the efficient cross-ventilation of the ward is not interfered with.

The diphtheria block runs parallel with the scarlet fever one, but is at a sufficient distance from it. In plan it is similar save that it contains only ten beds, having two wards of four beds each and two single-bedded wards, the latter being arranged on the same sensible plan as those in the scarlet fever block. There is a verandah running along

the whole of the eastern aspect of this pavilion, and opening off the ends of this are the sanitary annexes.

The observation or isolation block is in line with the diphtheria one. It contains two wards with two beds each, and all the arrangements are quite good.

The laundry block lies at the western side of the site. It is arranged in the form of a square, one-fourth of which is given up to the engineer's yard, and the various parts of the laundry are conveniently placed around two sides of the yard. It is fitted up with Barford and Perkins admirable machinery, and there is a modified Washington Lyons disinfecter. Attached to this block are the mortuary, post-mortem-room, and the ambulance-house.

Throughout the pavilions each bed has two thousand cubic feet of air space and one hundred and forty-four superficial feet of floor space. The internal walls are covered with impervious material; the floors are of polished teak, and all floor and ceiling angles have been rounded off. The Taunton "Diagonal" bedsteads and cots are used in the wards. The pavilions are warmed by open fire-places and by low pressure radiators. Shorland's ventilators are placed behind each bedstead, and the windows are all fitted with hoppers. For lighting purposes incandescent gas is used.

The cost of the site was £2,325, and a sum of £20,000 was obtained on loan for building expenses, but it was considered probable that this sum would be exceeded. It would, therefore, seem that, without the site, the hospital has cost at least £500 a bed, and this is far from being cheap.

The architects were Messrs. Charles Smith and Son, of Reading; the contractors, Messrs. Collier and Catley, of Reading; and the engineers were the well-known firm of Messrs. Barford and Perkins, of Peterborough.

SOCIAL AND POOR LAW PROBLEMS.

THE TEACHING OF THE MENTALLY DEFECTIVE.

THE education of the mentally defective seemed, when it was begun comparatively few years ago, one of the most hopeless of experiments. It is possible that in many cases they were withdrawn from the ordinary schools where they had hitherto been sent, as much because their presence was a hindrance to their companions of normal mentality as because it was thought that special training would do them good. But, according to a report recently brought out by Mr. R. Blair, the executive officer of the County Council, on the special schools in London, the results of the work have been eminently satisfactory. In many cases what has been regarded as mental defect may have been only slowness of development, for we are informed that after some instruction in the special schools no fewer than 126 children were able to return to the ordinary schools, while during the past year 131 out of the 159 children between the ages of 14 and 16 who left the schools during the past year, were able to find work at wages ranging from one to fifteen shillings a week. The number of children who did not leave until they were 16 years of age was 92, and of these 38 obtained work. This is on the face of it encouraging, but without knowing what was the nature of the employment which the children got, we cannot be quite certain that this means a marked degree of mental improvement. The putting of children of weak mind to work is no new thing; it was one of the features of the early factory system, and though much admired by the philosophers of the early nineteenth century, has failed to commend itself to later generations. It certainly is desirable, for their own sakes as well as for that of their families, that defectives should

be self-supporting, but as their weakness makes them peculiarly a prey to tyranny, more care would need to be exercised in placing them than if they were of normal intellect. This only means that after-care is as important as education. Thus, while domestic service is a good thing for normal girls, it is suited for defective girls only under circumstances of protection and consideration not easily obtainable. Defective boys who are of strong physique are likely to find work as labourers as easily as their more intelligent brethren, but when, as often happens, both mind and body are weak, suitable employment is more difficult to find. This is, however, no reason for giving up the defective as hopeless, but rather for continuing after school days are over as much as possible of the care that then improved their condition so much.

THE STORY OF THE INSANE FROM YEAR TO YEAR.

EIGHTEENTH ANNUAL SERIES.

THE WORCESTER COUNTY ASYLUM.

ON the first of January there were in residence 1,195 patients, and by the end of the year the number had risen to 1,199; but this slight increase by no means represents the annual increment of asylum patients, as 65 patients had to be boarded out in other asylums. It was, however, hoped that the new asylum at Barnsley Hall would be ready for occupation at the close of 1905. There were 234 first admissions; 35 readmissions; 117 recoveries; 15 discharged relieved; 50 discharged not improved, and 81 died. The total number under treatment during the year was 1,462, and the average daily number resident was 1,197. The recoveries were at the rate of 46.9 per cent. of the admissions; and the deaths were 6.7 per cent. of the average number resident; the first of these percentages being above the average, and the latter below it. Of the deaths, 19 were caused by cerebral and spinal diseases; 14 by consumption; 8 by other lung diseases, and 10 by colitis. Table X shows that 36 of the admissions owed their insanity to various moral causes, including domestic trouble, adverse circumstances, and religion; and among the physical causes, intemperance in drink accounts for 32; hereditary influence for 83; previous attacks for 69; and 59 were of unknown cause. Excepting colitis, there was no outbreak of infectious disease; but a great many patients suffered from it, and one of the staff was attacked, which is comparatively a rather rare occurrence. As 13.5 per cent. of the deaths were due to colitis, it is not to be wondered at that the Committee are considering the advisableness of building a temporary hospital for the isolation of this disease. We hope the step will be successful as there is no disease commonly met with in asylums which causes so much anxiety to the staff. The Worcester Committee "have been in communication with the Home Secretary as to the inadvisability of allowing criminal patients to be sent to this asylum, and associating with our other patients," and Dr. Braine-Hartwell gives his opinion "that a county asylum is not in any way the place for criminal patients. Their example, influence and habits have a most demoralising effect on the other patients." Asylum Committees and Medical Superintendents have often made similar statements, and THE HOSPITAL has again and again called attention to the injustice of sending such criminals to county asylums; but Home Secretaries are hard to move in such matters, and we much fear the Worcester protest will be barren of results. We are glad to learn that the nurses in this asylum are subject to a three years' course of training, and we should like to have learnt more about the system as regards ex-

amination, certificates, extra pay given, etc. The Committee record their appreciation of "the able manner in which the Medical Superintendent, and the other officers continue to discharge their duties." The average cost per head per week was 7s. 8½d. Private patients, whose residences are in Worcestershire, pay 15s. per week; but owing to the crowded state of the wards during the year no patients of this class were admitted.

EDITOR'S LETTER-BOX.

Our Correspondents are reminded that prolixity is a great bar to publication, and that brevity of style and conciseness of statement greatly facilitate early insertion.]

EXCESSIVE FREE MEDICAL RELIEF.

SIR,—I read with much interest Sir Henry Burdett's speech at the Hospital Officers' Association, as reported in to-day's *Telegraph*. The thanks of the profession are due to him for the stand he is taking up.

It is most disheartening that at the time of one's life when one has the inclination and the energy to work for small fees to find that the enormous so-called charitable institutions are in direct competition with the medical man. The general practitioner now is, in many cases, thoroughly competent to treat all disease except major operations. In my experience the special hospitals are the worst offenders, especially those which charge a small fee for medicine, etc.

Some years ago I used as anæsthetist to assist a doctor who was practising on the south side of the water. The operations were mostly minor operations on the throat and nose. The fee charged was 30s. to £2 2s., of which my portion was 10s. 6d.

One day he took me to a double-fronted shop in Walworth. On my inquiring what kind of a shop it was, as I saw nothing but well-filled sacks, I was informed the proprietor was a wholesale sweet-seller; it is true he was wearing a frock-coat so green with age that he might have been regarded as a suitable patient by any hospital authority. The operation was performed on his daughter for the usual small fee. I remonstrated with my friend on the smallness of the fee, pointing out that the proprietor was probably better off than either of us would ever be from the practice of our profession. He assured me that he could not get a larger fee, as if he did not do it at her father's house he would have to do it for nothing, so far as he was concerned, at the — Hospital, to which he was attached; in fact, she had already paid £8 to the institution for treatment, etc. This is not an isolated case. I have frequently been informed on mentioning a reasonable fee for an operation, considering the house rent they pay, etc., that if I can't do it for so much they must go to the hospital.

About the same time I saw reported in the papers a man, described as a costermonger, charged with brutally assaulting a girl who had assisted the police in his capture. He was in danger of getting six months' hard, but he was remanded to enable him to be represented. He was represented by a leading K.C.—Mr. Horace Avory, I think. I do not suppose counsel reduced his fee from the circumstances of the case. The point which surprised me was that a costermonger could find the cash to be so ably represented. We are constantly hearing of appeals from the various hospitals for funds to carry on the increased work. The London Hospital is not behindhand in this respect. In these days of statistics it would be interesting if the authorities of the London Hospital would publish the number of in-patients in 1905 and the number of patients received as in-patients during that period, who resided outside a radius of the London Hospital of, say, 20 miles. I

have had experience of three London hospitals; during my residence at St. Thomas's I was much impressed by the enormous distance some of the patients came from. In the medical cases they were at all events seen by the visiting physician, but in the surgical cases they were not unfrequently operated on by the house surgeon. In the General Lying-in Hospital, Lambeth, it was the exception to admit a single woman, yet the unmarried daughter of a pharmaceutical chemist travelled from a place, the return fare to which was 14s., in order to be confined at that hospital. In addition she took lodgings in the neighbourhood until she was actually in labour. At the time I thought of the many doctors doing midwifery at £1 1s., and doing it conscientiously.

Naturally the question is asked, But why does all this abuse take place? The answer is, It is the duty of the administration to provide beds; it is the duty of the R.M.O. to fill them.

If the Houses of Parliament and Lambeth Palace were turned into hospitals I undertake to say they would very soon be filled, but where would the patients come from? No matter that they come from Ireland, Scotland, and Wales, that is no concern of the R.M.O. We hear a great deal about the overcrowding of the medical profession; but if our interests were as well protected as those of the legal profession are there would be plenty of scope for all of us.

T. W. S. PATERSON, M.A., M.B. Cantab.

42 Holland Park, London, W.

THE METROPOLITAN HOSPITAL SUNDAY FUND AND LETTERS OF RECOMMENDATION.

A HOSPITAL OFFICIAL writes: But a passing note was made in the last issue of *THE HOSPITAL* to the remarks of Mr. Henry Morris, who at the annual meeting of the Metropolitan Hospital Fund, asked permission to point out what he thought were two blots on the working of the Fund. One was that the letters of recommendation issued by hospitals to the Fund were dated, and were not accepted after expiry, and the other was that private subscribers were accorded twice as many "letters" as the Fund for each unit of subscription.

In regard to the first point there are very solid reasons why letters of recommendation should be dated. In the first place an annual subscriber's privileges are everywhere confined to the year for which the subscription is paid. To quote but one instance, no member of a club would claim for the privileges of his club to be extended to him over a second year for the same subscription, should he not have used the club during the year for which the subscription was paid. The effect of this limitation in regard to hospitals is that it regularises the work of the hospitals. If "letters" were to be honoured at any time, hospitals would be liable to have at one season large numbers of patients awaiting admission, and then at another, because all "letters" have been presented, no patients applying and numbers of beds vacant. There is now a great possibility of this in special hospitals and special departments, due to the great changes in some forms of treatment, particularly electrical treatment and in apparatus. For instance, the skin hospitals and the skin departments of the general hospitals during the early part of 1906 were thronged with cases of ringworm owing to the discovery that the complaint could be cured in twenty minutes by application of x-rays, as against the weeks, and sometimes months, required by medicinal treatment.

Then, again, a few wealthy Governors with an accumulated number of "letters" might swamp the hospital with applications and exclude the patients recommended by a

large number of individual Governors. This would have a very disastrous effect upon the subscription list, for the hospital would lose a large amount in new annual subscriptions from persons desirous of securing the early admission of cases in which they were personally interested and who otherwise would not subscribe.

Then, quite apart from these considerations, the particulars of procedure, times of attendance, terms of admission, etc., are modified from time to time, and the "letters" thus become out of date, and by their presentation endless trouble, confusion, and disappointment, would be caused to patients, and to those coming long distances the matter would be serious. As at present arranged, alterations of this character are deferred until the next issue of "letters."

With regard to the second point, it must be remembered that primarily the object of the Hospital Sunday Fund is to assist the hospitals, and if the Fund required no privileges the grants would represent gifts to the hospitals of the face value of the awards. The Council, however, doubtless recognising the principle underlying the very system of "letters," that human nature requires a *quid pro quo*, requests hospitals issuing letters of recommendation to send supplies of them for the Fund to issue at its discretion to the contributing clergy, and this completely alters the situation. The Fund may make a grant of £100 to a particular hospital and yet take from the hospital treatment for patients to the value of £200. To explain this, the following instance may be quoted. Suppose a special hospital to give one in-patient "letter" for an annual subscription of one guinea, the average period of residence to be three months and the average cost per occupied bed £85 per annum. These are by no means extreme figures. Then for an annual subscription of one guinea the Governor receives treatment for his patient to the value of £20. He takes out of the hospital twenty times what he pays in! Small wonder then that many hospitals are badly in need of funds. The privileges accorded to Governors are far too generous in the great majority of cases.

It is, of course, possible to give Governors a privilege that is more in treatment than is covered by their subscriptions, because experience shows that Governors do not use all their "letters" every year, but the Hospital Sunday Fund is not on the same footing as a private Governor, and although a number of the recommendations issued to the Hospital Sunday Fund are not used, yet the large number that are must be a great tax upon the resources of the hospitals.

Of course the effect of ceasing to issue "letters" to the Fund would undoubtedly be a drop in the amount of the awards, but the parishioners who had been in the habit of obtaining the necessary "letters" from the clergy would be

obliged to subscribe to the hospitals for which they needed recommendations, and the hospitals would probably be the gainers in the long run.

PROFESSOR HALLIBURTON, F.R.C.P., will deliver an address on "The Diet of To-day," at 34 Devonshire Street, W., on January 9, at 4 P.M.

NOTICE TO CORRESPONDENTS.

All MSS., Letters, Books for Review, and other matters intended for the Editor should be addressed THE EDITOR, "THE HOSPITAL," THE HOSPITAL BUILDINGS, 28 & 29 SOUTHAMPTON STREET, STRAND, W.C.

The Editor cannot undertake to return rejected MSS., even when accompanied by stamped directed envelope.

Notice to Advertisers and Subscribers.

All Advertisements, Orders for Copies of THE HOSPITAL and Business Communications should be addressed to THE MANAGER (Not to the Editor), THE HOSPITAL, 28 & 29 Southampton Street, Strand London, W.C.

The Cost of Subscription, post free, is as follows:—Per week, 3d.; per quarter, 8s. 3d.; per half-year, 16s. 6d.; per annum, 13s. Foreign and Colonial:—Per annum, 19s. 6d., payable, in all cases, in advance.

Medical and Administrative Appointments.

SEAMEN'S HOSPITAL SOCIETY

The Committee of Management invite Candidates for the following appointments at the Dreadnought Hospital, Greenwich, to which is attached the London School of Clinical Medicine:—

DENTAL SURGEON.

MEDICAL OFFICER in charge of the ELECTRICAL DEPARTMENT.

Candidates must be duly qualified and registered, and the Dental Surgeon must hold a diploma in Dental Surgery.

The elected Officers will be members of the Honorary Medical Staff, but the appointments do not carry with them seats on the Council. They will be appointed for twelve months, but will be eligible for re-election.

The Dental Surgeon will attend at the Hospital when required in consultation with the members of the Honorary Medical Staff, and the Medical Officer in charge of the Electrical Department will attend at the Hospital once a week.

Applications, with copies of testimonials, which must be printed or typewritten, to be sent in on or before JANUARY 10th to the undersigned, from whom further particulars can be obtained.

By order,

P. MICHELLI,
Secretary.

Seamen's Hospital Society, Greenwich.
December 10th, 1906.

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, VENICE.

A SENIOR RESIDENT MEDICAL OFFICER REQUIRED on January 20th, 1907.

Salary £200 per annum, with Board and Lodging.

Also Two ASSISTANT RESIDENT MEDICAL OFFICERS at £80 per annum, with Board and Lodging.

Every Candidate must be duly qualified, registered, and unmarried. He must have knowledge of Bacteriological methods.

Applications in candidate's own handwriting, stating his age and qualifications with one copy of three recent testimonials, must be sent at once to the SECRETARY, 34 CROFTON STREET, CHANCERY LANE, LONDON.

THE BEST NATURAL APERIENT WATER.

Hunyadi János

For GOUT and RHEUMATISM.

Professor Immermann, Basle, Professor of Internal Medicine at the University:—

"Hunyadi János has invariably shown itself an effectual and reliable Aperient, which I recommend to the exclusion of all others. Never gives rise to undesirable symptoms even if used continuously for years."

AVERAGE DOSE.—A wineglassful before breakfast, either pure or diluted with a similar quantity of hot or cold water.

CAUTION.—Note the name "Hunyadi János," the signature of the Proprietor, ANDREAS SAXLEHNER, and the Medallion, on the Red Centre Part of the Label.

The Hospital

A JOURNAL OF

The Medical Sciences and Hospital Administration.

VOL. XLI.—No. 1, 1961.

SATURDAY, JANUARY 12, 1907.

HEALTH-TRAINING IN ELEMENTARY SCHOOLS.

THOSE aspects of the problem of elementary education which have for some time engaged public attention, are associated with controversies that lie altogether outside our province in these columns. We may, however, be permitted the remark, that the disputes of politicians and ecclesiastics, strenuous though they be, do not occupy the entire educational area, and that many departments of school life and work are happily beyond the reach of the prevailing controversy. Whether these are more or less important than the questions which excite the sects, we do not pretend to say, but it is certain that to an ever-increasing extent public opinion is learning to recognise that true education, even in its elementary developments, has for its aim, not merely to impart knowledge and to train the mind, but also to promote physical development and to form character. Hence the public, though wearied of the subject of elementary education, at least in its political relationships, may well wish to know how the actual work of the schools is being conducted, and to what extent this work is contributing to the promotion of manhood and moral worth in the nation. For, after all, whatever else is in dispute, this is certain, that unless these ends are attained, our national plan of education is a failure, and the future can bring nothing but anxiety and disaster.

Elementary educational arrangements, as a training and discipline for the rising generation, more especially in reference to physical health and well-being, have for some years been gaining the countenance and goodwill of the school authorities, and it is satisfactory to find, from a recent statement by Mr. A. J. Shephard, Chairman of the Education Committee of the London County Council, that demands in this direction are fully recognised. The health of school children is obviously a question which controls all forms of educational activity. Thus, expert medical advice and control appear as essential parts of the educational problem, and this, more particularly, as the collection of large numbers of children together day after day means special risks to health, in reference more particularly to the spread of infectious disease. Delicate questions of responsibility, both to individual children and to the community generally, arise in this connection,

and solutions for these questions can only be provided by competent hands. The care and supervision needed in the directions just indicated may be made of the first educational importance to the teachers, and through them to the children. Hence one reads with satisfaction that the head teachers of the schools in the metropolitan area are expected to give attention to such matters as the ventilation of the school buildings, the scrubbing of floors, and the cleansing of "offices." Children who come to school dirty are washed or, if necessary, are sent home for more searching methods of purification. In short, in these and other ways, a tone and influence are sustained which suggest day after day the value of cleanliness and fresh air as agents in the promotion of good health and the prevention of disease. Again, the cultivation of bodily vigour is now directly encouraged by the introduction into the curriculum of all elementary schools of systematised physical exercises. Here, also, as in many other modern educational developments, scientific method has largely superseded crude beginnings. To secure the interest of the mind is as much a part of these exercises as to strengthen the muscles and to promote bodily development; and games and athletics ought to be made instruments of mental and moral training as well as ends to physical well-being.

Detailed reference to the medical inspection of the children in the elementary schools may engage us on another occasion. It is sufficient here to remark that it has been made much more thorough and much more extensive than was even until recently the case, and though it is likely to raise some awkward questions, these ought not to be beyond the reach of statesmanship and goodwill. Public opinion will certainly view with increasing impatience attempts to drive children through an educational curriculum without taking adequate care to see that their bodily health fits them to take advantage of the process. Such attempts are cruel in themselves, and they display a complete failure to appreciate a true educational ideal. The L.C.C. are following a very different plan, and we believe they can justify their procedure. At all events, it is satisfactory to learn that, in spite of the din of controversy, the real educational work of the schools goes on peacefully and efficiently, and that those charged with the oversight and direction of it are fully alive to the relationships which necessarily exist between the *mens sana* and the *corpus sanum*.

THE TREATMENT OF GENERAL PERITONITIS.

GENERAL peritonitis is one of those conditions the treatment of which is dependent upon its early recognition and diagnosis. Operative interference is the one means which offers any reasonable prospect of recovery, and this fact has now received general recognition. Yet Mr. Mayo Robson in a recent address on the subject still finds reason to complain that the old expectant method with administration of opium has not been fully discarded. We are confident, however, that the rank and file of the profession are not so far behind its leaders that they still adopt this method as a rational mode of treatment for acute general peritonitis. The mistake lies in a failure to recognise the early signs and symptoms of the disease and a too great anxiety to give the patient immediate relief from his suffering.

General peritonitis does not arise suddenly *per se*, labelled in plain figures, but sets in insidiously as a result of some previous abdominal affection. To relieve this primary affection opium is resorted to, and in consequence the further development of symptoms, which would lead to an immediate recognition of the spreading infection, is checked and masked, and a fatal delay results. No other morbid condition calls for such careful and exact estimation of the symptoms and the changes they may undergo. The first principle, therefore, in the treatment of these abdominal affections is the avoidance of anything like opium which may obscure the actual course of the disease. The use of purgatives is now generally condemned in these conditions. Internal peristalsis is probably largely responsible for the spread of a localised infective process to the general peritoneum. It should be, therefore, one of the aims of treatment to reduce peristalsis to a minimum. With the same idea in view food should be withheld from the stomach. Severe or continued vomiting may be controlled by lavage.

There is still some diversity in the methods of operation in cases of general peritonitis. When surgical interference was first undertaken for this condition the operator was content to relieve and if possible remedy the local lesion with as little interference, with the general abdominal cavity, as possible. So great was the respect for the peritoneal domain that the incision was not infrequently too small to allow a proper recognition of the condition of things within. Then came the bolder methods of long incisions, free explorations, attended with evisceration and irrigation of the peritoneum. It is now generally agreed that these heroic measures are not justified by the results they have yielded, and at a discussion on the subject at the last annual meeting of the British Medical Association there

was a consensus of opinion in favour of a return to the more conservative methods of operation.

The researches of Sargent and Dudgeon on the bacteriology of general peritonitis have exercised a marked influence on surgical views in this respect. They showed that, with the exception of cases in which the peritoneum is suddenly overwhelmed with a virulent infection, the staphylococci albi are the first to migrate and set up a mild inflammatory reaction with increased phagocytosis and lymph formation. In this way, they suggest, protective barriers are set up against the invasion of the more virulent micro-organisms. Evisceration and irrigation, by interfering with these protective processes, render the peritoneum more liable to a subsequent general infection. But, apart from these considerations, there is the additional factor of shock, which inevitably accompanies these more extensive operations, and must exercise considerable influence on the rallying or recuperative powers of the patient.

Mr. Mayo Robson gives concisely the leading principles which should guide the surgeon in these operations. They are: The removal or remedy of the cause of the infection; efficient local drainage; rapidity of operation; the avoidance of unnecessary exposure and handling of viscera; and the prevention of shock.

In the after-treatment of these cases great value is now being ascribed to saline injections per rectum. Dr. Murphy, of Chicago, who is able to show a record of 35 recoveries in a series of 36 operations, lays special stress on this measure. He suggests that it reverses the direction of the lymph current, causing a secretion of fluid into the peritoneal cavity and subsequent drainage into the pelvis. It also combats shock by filling the blood-vessels in the same way as interstitial or intravenous saline injections. The semi-recumbent posture, known as Fowler's position, promotes drainage of the infective fluid from the diaphragmatic area to the less absorptive pelvic region.

By the accumulation of the results of individual experiences, a steady evolution in the surgical treatment of peritonitis has been taking place, and surgeons have learned the necessity of setting certain limitations to their interference with the natural physiological processes of the body. The striking successes, obtained by certain operators, are shown to be due to early diagnosis followed by prompt relief of the primary cause by immediate operation, and to special attention to the adjuvant measures, such as rectal saline injections. A limited surgery, combined with every effort to eliminate shock and assist the natural reactive powers of the organism to infective processes, have been attended with a greater measure of success than the more drastic methods of modern abdominal surgery.

ANNOTATIONS.

Congress of Climatotherapy and Urban Hygiene.

THE third Congress of Climatotherapy and Urban Hygiene will be held during the Easter vacation, 1907, on the French Riviera and in Corsica. The sessions will extend over seven days, and will be conducted at Cannes, Monaco, Mentone, and Ajaccio, but all the stations on the Mediterranean littoral are included in the programme. In 1904 the Congress met at Nice, and in 1905 at Arachon, and great efforts are being made to secure that the meeting of the present year shall rival the success of its predecessors. The local representatives of the medical profession have obtained the hearty co-operation of the municipal authorities, and adequate arrangements will be made for the convenience and enjoyment of medical visitors from foreign countries; a number of fêtes, banquets, excursions, etc., are included in the scheme of organisation. It is anticipated that a reduction of 50 per cent. in railway and steamboat charges will be secured, and that special terms for visitors will be granted by the hotels. Full information on these and other points can be obtained on application to Dr. Verdalle, 1, Boulevard d'Alsace, Cannes, who is acting as general secretary. The President of the Congress is Dr. Calmette, Member of the Academy of Medicine and Director of the Pasteur Laboratory, Lille, and a number of well-known French physicians are included among the vice-presidents. In the papers and discussions special attention will be paid to the climatic value of the French Riviera in the treatment of chronic diseases of the respiratory organs, of local tuberculosis, and of diseases of the nervous system. The Congress affords a convenient opportunity for British practitioners to make themselves familiar with the therapeutic influences to be obtained on the French Riviera.

Boracic Fomentations.

FOUR-HOURLY boracic fomentations have for some time been the routine treatment for all superficial inflammatory or suppurative lesions, and there is probably no more efficacious or soothing application for these conditions. They have also to a large extent superseded the dressings with oil or ointment which were previously in vogue for burns and scalds. But it may be doubted whether the virtues and wide utility of this form of dressing have yet been fully realised. The qualities of a boracic fomentation are threefold. The heat increases the circulation of the part, causing a dilatation of the capillaries, and at the same time checks any hæmorrhage from the larger vessels. The boracic acid is a mild antiseptic, acting injuriously upon any germs present, but causing no injury to the tissues, and at the same time it is a mild astringent and irritant, and the moisture is soothing and prevents incrustation of any discharge and adhesion of the dressing to an open wound. A boracic fomentation, therefore, not only has the power to reduce inflammation and cleanse a wound from infection, but it also promotes healing and forms a most suitable dressing for any superficial lesion, other than a strictly aseptic surgical wound in which

the edges unite by primary union. It is also a most useful form of applying moist heat to injuries of the tissues without any external wound, such as contusions, sprains, and strains. On the supposition of some power of absorption by the skin, the boracic acid may possess some virtue in these conditions and will at any rate inhibit any infective element in the skin itself. There is some skill required in the proper application of these fomentations. Different conditions require different degrees of heat and moisture, but as a general rule it is preferable to retain a certain amount of moisture in the lint, and in that case the fomentations must, of course, not be applied at boiling point. The oil silk or jaconet applied over the lint should be sufficiently large to extend beyond the margin of the lint so as to retain the moisture of the dressing.

In Defence of Shoddy.

SOME time ago Mr. F. W. Reuss, of Dewsbury, gave a lecture to the University of Leeds Textile Society on "Shoddy, Mungo, and Rags: Their History and Importance in Woollen Manufacture." Very few people know what an important item shoddy—that substance whose name is a by-word for all that is worthless—is in English industry. Mr. Reuss estimated that every month England exports between five and six million yards of shoddy. Shoddy is made from rags, torn up and re-woven, and it is estimated that from 1,000 to 1,400 tons of wool rags are used in Yorkshire every week in the manufacture. Much of this is imported. Rags are ever an object of suspicion as possible carriers of infection, and the import of rags from places where infectious diseases are epidemic is frequently forbidden. Mr. Reuss seemed to think that these precautions are unnecessary, and declared that it had never yet been proved that a rag of any kind had conveyed infection. Some sanitary scientists have discussed the question, and have come to the conclusion that there has never been a case of disease carried from one place to another by means of rags. Mr. Reuss suggested that the existing restrictions on the importation of rags was a subject for complaint, and probably his hearers agreed with him. Yet, because shoddy is such an important manufacture—for if it did not exist the poorer classes of the community would be unable to get changes of upper clothing as frequent as for health's sake is desirable—it is important that these rags should be beyond suspicion. The confiscation of a few bags of rags is less serious, even to manufacturers, than the loss of webs of the stuff into which these rags are woven, and infinitely less serious than the risk of spreading disease. An epidemic traceable to the wearing of shoddy would damage the whole industry most severely. Mr. Reuss spoke with some acerbity of the existence of anthrax in pure wool and of the disease it causes. It is matter for regret that wool-sorters should suffer from anthrax, rare as such cases are, but we cannot see that their existence is an excuse for being more careless in bringing in rags. To add "rag-sorter's" to "wool-sorter's" disease would hardly profit anyone.

MEDICAL OPINION AND MOVEMENT.

THE cry of "overcrowding" is fairly general, and applies to most professions and trades. We are not aware, however, that it has made the same impression, as shown by a reduction in the entries to other professions, as it appears to have done in the case of medicine. In many countries this falling-off in the number of medical students in recent years is very marked. In the United States in 1904 there were 28,142 medical students, whereas in 1905 there were only 26,137. The homœopathic schools show the most marked reductions. In 1900 they had 1,509 students, as against 1,104 in 1905. In Germany the number of students decreased from 8,513 in 1888 to 6,232 in 1903, and in France between 1895 and 1905 the numbers have fallen from 7,779 to 6,763. In this country, also, the idea is gaining ground that an average income of £300 a year is hardly sufficient compensation for a strenuous life preceded by an expensive and arduous education.

THE ability of sodium citrate to render the casein of cow's milk more easy of digestion for infants, as originally suggested by Wright, is receiving general confirmation from the profession. It will be remembered that Wright's theory was based upon laboratory experiments, from which he concluded that, by precipitating some of the calcium salts in the milk with sodium citrate, the casein of cow's milk could be made to form clots in the stomach more resembling those of human milk. In France and America, as well as here, several physicians have recently published reports showing the satisfactory results obtained by administration of sodium citrate in those cases in which the infants show an inability to digest the casein of cow's milk in the ordinary way. The usual dose is one to three grains per ounce of milk, and should be prescribed in aqueous solution with a few drops of spirit of chloroform to prevent the formation of moulds. It is best made up so that one drachm of the solution added to each feed will give the necessary quantity of the sodium salt.

It is probably not very widely known in this country that the Dominion of Canada possesses no general register with a recognised standard of qualification for the medical profession. Each province possesses the right to establish its own licensing authority, and medical men, qualified and registered in one province, are not allowed to practise in an adjoining province under penalty of a fine. The conditions for registration of general practitioners who have qualified elsewhere than within the province vary considerably for the different provinces. The preliminary examinations are generally remitted, and in some cases the finals also; but the full fees always have to be paid. Ontario, which is reputed to have the highest standard of medical education, also makes the most stringent demands upon those presenting themselves for registration within the province. Attempts have been made to arrange for a general registration of medical men for the Dominion, but so far Quebec has objected

on the ground that, owing to a large French population, there would be no advantage to the province by such a measure. If a greater reciprocity is to be looked for between the Dominion and the Mother Country, as was foreshadowed recently by the President of the General Medical Council, a general registration for the colony would appear to be a necessary preliminary.

THE expectations aroused by the discovery of the tubercle bacillus by Koch and the diphtheritic anti-toxin by Behring have not been fulfilled. The arduous labours of many brilliant workers in the field of bacteriology have done much to elucidate the processes of disease and to help us in our methods of prophylaxis and treatment; but we are still without a specific for tuberculosis, and we are still in the dark as to the cause of cancer or the means to combat it. It is not unreasonable, then, that a return should be made to lines of research which have already yielded results quite comparable in efficacy to those of serum therapy. In a recent communication to the Société de Médecine de Paris, Dr. L. Lematte has made out a well-reasoned case for a more thorough investigation into the therapeutic possibilities of the metals as specific bactericides. In mercury we have a definite specific against the ravages of the syphilitic microbe, and there is no *a priori* reason why other metals or combinations of metals should not have a like specific action on the morbid processes of the tubercle bacillus or other pathogenic micro-organisms.

For some years the chemist and bio-chemist have been so absorbed in the analyses and syntheses of complex organic compounds that the rôle played by the inorganic elements in the animal metabolism has been largely overlooked. The recent discoveries in chemical physics, notably the advances in the knowledge of the nature of chemical action and the interaction of the anions and cations, have again attracted the attention of investigators to the importance of the metallic ions in biological processes, and evidence is accumulating to show that these metallic ions are an essential factor in the oxidations, reductions, and other metabolic processes of living organisms. The necessary presence of calcium in the processes of blood coagulation and the clotting of milk is already well known. Professor Loeb has based a theory of irritability of tissue and muscular contraction upon the interaction of certain basic ions, notably sodium and calcium, and he has shown that eggs of a certain sea-urchin will develop, by appropriate treatment with sea-water slightly altered in constitution, without fertilisation by spermatozoa. These and similar facts indicate clearly the importance of minerals in the life processes. Dr. Lematte claims to have obtained favourable results by interstitial injection of chloride of gold in cases of inoperable cancer, but he is not yet prepared to say that he has found in gold a specific for cancer comparable to mercury in syphilis.

HOSPITAL CLINICS.

TWO CASES OF HYDATID OF THE LIVER.

By LEONARD A. BIDWELL, F.R.C.S. Eng., Surgeon West London Hospital, Dean of the Post-Graduate College.

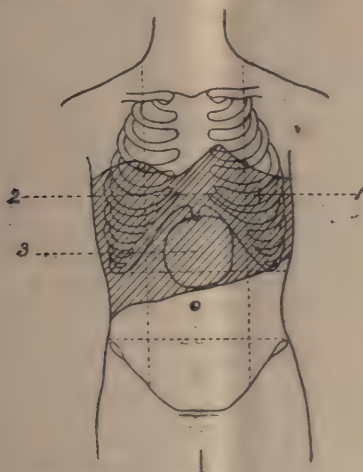
IN this country cases of hydatid of the liver are very uncommon, and it is curious that two such cases should have been under my care at the hospital within a couple of months. Both of them are unusual cases, and a description will be interesting.

Case I. was a young lady, aged 34, whom I saw with Dr. MacBurney, on May 2, on account of a large swelling in the upper part of the abdomen accompanied by general wasting. The following history was given. The patient had suffered from right pleurisy with effusion four years previously, and the chest had been aspirated; with this exception she had good health and remained well till November 1905, when she had an attack of jaundice, accompanied by abdominal pain and vomiting. After 14 days in bed the jaundice and pain disappeared, and she became convalescent. She did not, however, regain her strength, but got about till six weeks before I saw her, when she had another attack of jaundice, which was accompanied by vomiting and pain like indigestion. The pain and sickness went away after two or three days, but she began to grow weaker, so after three weeks

siderably emaciated; there was a slight icteric tinge of the conjunctiva, but no jaundice. The temperature was 100° , the pulse 112, and the respiration 28. She suffered from dyspnoea on movement.

On examination of the abdomen there was a prominent swelling in the upper part occupying the epigastric and right hypochondriac regions, extending about four inches beyond the costal arch, and measuring about five inches across. It was dull on percussion, and there was a slight thrill in it. Below the swelling, the lower edge of the liver could be felt about one inch above the umbilicus. The swelling was only slightly tender and there was no redness of the skin. The rest of the abdomen moved fairly well, and was resonant. On examination of the chest the heart was found to be displaced outwards, the apex beat being one and a half inch outside the left nipple and in the sixth space; the sounds were normal. There was impaired resonance over the whole of the front of the right chest, and absolute dullness with loss of breath sound below the fourth cartilage. Posteriorly there was dullness and loss of breath sound from the angle of the scapula downwards. On the left side there was impaired resonance over the base behind.

Now here we had a case in which there was some swelling pushing down the liver and pushing up the lung; it was, therefore, situated in the subphrenic space, and we had to consider what its nature could be. The commonest form of swelling in the subphrenic space is an abscess, and the elevation of temperature in this case was in favour of this view; we then had to consider what are the commonest causes of abscess in the subphrenic space; of course an abscess in this place may arise in connection with disease of any viscus which is situated in the upper part of the abdomen, or even may track up from the lower part of the abdomen. The most common causes of subphrenic abscess are, first, rupture of a gastric or duodenal ulcer, where the neighbourhood of the ulcer has been shut off by adhesions prior to the rupture; secondly, it may follow suppuration in the gall-bladder or ducts, and is then secondary to acute cholecystitis; thirdly, it may be secondary to suppuration in the kidney; fourthly, to an abscess arising in connection with an ulcer of the colon; fifthly, in consequence of acute suppurative pancreatitis; and finally in connection with appendix suppuration. Now in the case before us the history was unlike that of a rupture of an ulcer of the stomach or duodenum. Thus there was no sudden onset, and the symptoms were completely relieved after the first attack; moreover the duration of the case for six weeks was rather too long for so localised a collection of fluid. With regard to the second cause, namely suppuration in the gall-bladder or ducts, everything seemed to point



CASE I.—MISS E. P., AGED 34.

1. Apex beat. 2. Dull area. 3. Special prominent swelling, not absolutely dull.

she consulted Dr. MacBurney. He found that the abdomen was considerably enlarged, the breathing very embarrassed and the temperature about 100° . She was then kept in bed and on light diet, but the abdominal pains returned, were most marked on the right side, and gradually got worse. There was no further jaundice nor vomiting, but nausea was always present. There had been no rigor. The temperature was slightly elevated, the bowels were constipated. When I saw her she was con-

to this as the cause. We had a history of the onset of the first attack being abdominal pain, jaundice and vomiting—a pretty good history of gall-stones; the second phase of the illness commenced in a similar way, and the swelling coming on after a rise of temperature was suggestive of suppuration. The course of events seemed to have been—the engagement of a gall-stone in a duct causing inflammation of the duct, and consequently jaundice, followed after the second engagement by suppuration. The third cause of abscess, namely suppuration in the kidney, was negated by the absence of any urinary symptoms, and of any previous attack of renal pain, since most of the cases of subphrenic abscess due to kidney suppuration are due to calculus, and symptoms of that condition have usually existed beforehand. The abscess in connection with ulcer of the colon is a rare condition and almost impossible to diagnose. Usually there are symptoms of ulcerative colitis, but these may be absent and symptoms of peritonitis may be the only sign; at least this was so in the one case which I have had. The fifth cause, namely acute suppurative pancreatitis, is also rather an obscure condition to diagnose, but this was very much in my mind when considering this case; the acuteness of the pain, the vomiting, which was profuse, and the emaciation, were greatly in favour of this obscure disease; there were, however, no other signs, such as fatty stools. Finally, abscess in connection with appendicitis was considered, as I am familiar with it. I have described to you a case which I had seen during an acute attack of appendicitis, and in which I found a subphrenic abscess some weeks afterwards without any abscess having formed in the region of the cæcum. Since then I have seen another case in which a subphrenic abscess formed secondarily to an abscess in the region of the cæcum. In the case which we are considering, the onset of the case was unlike that of acute appendicitis, and there never had been any signs of any inflammation of the appendix.

Finally, then, my diagnosis was a subphrenic abscess, due to acute cholecystitis, to acute pancreatitis, or to appendicitis; my final opinion was in favour of gall-stones as the original cause, but, of course, I am too old a hand to give a definite diagnosis before opening the abdomen. I was right about the subphrenic abscess, but I was wrong as to the cause of it.

I opened the abdomen over the most prominent part of the swelling by an incision through the outer fibres of the right rectus muscle. On opening the peritoneum a bluish-looking mass presented, which at first rather looked like a cyst-wall, and I thought that I had to deal with a pancreatic cyst. On enlarging my incision I found that the bluish mass was in reality the liver, which was tightly stretched over a resistant mass. On examining further, the peritoneum was quite healthy below the liver, and the stomach and other organs normal; above the liver, between it and the dome of the diaphragm, were dense adhesions, which, of course, were what I expected to find in a subphrenic abscess, the liver being pushed downwards three or four inches. I then put a sponge over the peritoneal incision

and decided to explore the subphrenic region through an intercostal space. A large-sized aspirating needle was inserted through the seventh intercostal space in the anterior axillary line, and some pus was drawn off. An incision was then made over the site of the puncture, and $1\frac{1}{2}$ inch of the seventh rib was excised and the pleura opened. The dome of the diaphragm then bulged into the wound, and this was sutured all round to the parietal pleura for the space of about an inch. An incision was then made into the dome of the diaphragm, and a quantity of pus evacuated, followed by an immense number of hydatid cysts. A very large drainage tube was then inserted and stitched in position. The thoracic wound was closed, and the abdominal incision was then united by three layers of sutures in the ordinary way and sealed up with collodion.

There is little to mention in the further progress of the case; the abdominal wound healed perfectly, but cysts continued to be discharged in large quantities through the drainage-tube. Three days after the operation the right lung began to expand, the area of resonance advanced, and the dyspnoea improved. The drainage-tube was removed after three weeks, although the cysts were still being discharged. She left the hospital convalescent in another fortnight, but the wound was not healed, and cysts were still discharged at intervals. Her general condition, however, was excellent. I saw her again a few weeks later; she had gained flesh, but cysts still continued to escape, so I started injection of thymol. After another month the wound had healed, and the patient is now well.

Now with regard to the line of treatment adopted. First it is essential to make a preliminary abdominal section to ascertain what is the precise cause of the condition, and to make certain of the position of the abscess or cyst. After having done this it is best to drain the abscess through the chest wall so that there should be no fouling of the peritoneal cavity. The abdominal incision, however, should not be closed, as in cases of difficulty in finding an abscess in the subphrenic space it is useful to have a finger in the abdomen when passing an aspirator very deeply towards the liver.

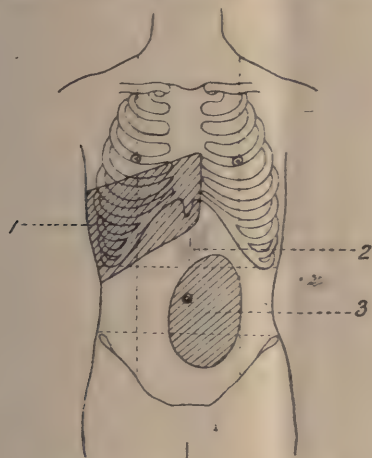
After resecting the rib and opening the pleural cavity, stitching the parietal pleura to the dome of the pleura effectually shuts off the pleural cavity and prevents any pleurisy. Lastly, no attempt should be made actively to scrape these cysts, as the walls may be very thin in parts, and any violent scraping might cause perforation into the abdominal cavity. The after progress of these cases is always very tedious, as the discharge will continue until all the daughter cysts are evacuated. The destruction of the cysts may be hastened by injection of thymol, as was done in this case.

Now, ought the case to have been diagnosed? It is difficult to judge oneself, and so I am inclined to think that it could not be. The usual symptoms of hydatid cyst are a painless swelling of long duration, absence of febrile temperature, or of any effect on the general health, and of jaundice or vomiting. The only symptom of a hydatid cyst in this case was the thrill which was felt.

One word against a preliminary aspiration for

diagnostic purposes. This should never be done, as it is impossible to say what organ may be damaged by accident, and had it been done in this case the peritoneum and liver would have been perforated. Moreover, the diagnostic result would have been *nil*, for after my aspiration only pus escaped, and this on being examined microscopically was found to contain no hydatid element, but gave a pure culture of streptococci.

The second case was a woman aged 63, whom I saw in July last. She had enjoyed good health and had worked hard as a charwoman. For twenty years she had noticed in the abdomen a lump which was situated below the umbilicus on the left side. In April she had a severe attack of jaundice, which followed colicky pain in the abdomen, and then passed off in a few weeks; after this she became emaciated and complained of severe pains in the back. When I saw her the abdomen was consider-



CASE II.—MRS. W., AGED 63.

1. Liver dullness extended two fingers breadth below costal arch.
2. Diminished resonance, but not dullness. 3. Dull fixed tumour.

ably distended, and there was a large tumour, the size of a football, occupying the umbilical, left lumbar, and inguinal regions, its upper border being situated one inch above the umbilicus. The tumour appeared to be fixed, was dull on percussion, and there was a well-marked thrill. Its position rather suggested an ovarian cyst, so a vaginal examination was made, but the tumour appeared to have no connection with the uterus or appendages. The liver was enlarged and extended about two finger breadths below the ribs; there was an interval of two or three inches between the liver dullness and that of the tumour; this area was resonant, but on deep pressure considerable resistance was felt. The abdomen was not tender on palpation. The area of liver dullness extended upwards to the fourth rib in front.

There was no sign of ascites; both flanks were resonant. The other organs were healthy. The temperature was normal, and the pulse was 70.

Here was a case presenting several difficulties in diagnosis. In the first place we had a cystic tumour which was situated principally on the left side and below the umbilicus, and which had existed for twenty years; it had grown slowly, but more rapidly lately. The first diagnosis was an ovarian cyst, but

against this was the freedom of the tumour from the uterus and appendages; this freedom is sometimes found in old-standing ovarian cysts with long pedicles. The second point against an ovarian cyst was the fixed condition, and the third the apparent continuation of the cyst behind the resonant area above the umbilicus. This latter sign seemed to point to some cyst arising in the lesser cavity of the peritoneum and extending downwards. Now the most common cyst in this position is one in connection with the pancreas, and this was carefully considered. Another cystic swelling in this region is a hydronephrosis, but in such a case the swelling nearly always extends into the loin, which did not occur in this case. I therefore excluded kidney, and was rather in favour of a pancreatic cyst. Now pancreatic cysts do not give rise to the same symptoms of pain and emaciation that occur in chronic pancreatitis, and they are often practically painless swellings; they do not, however, last so long as twenty years, and this was the main point against my diagnosis. Then, again, we had the history of the colicky pain, followed by intense jaundice. Was this connected with the tumour in the lower half of the abdomen, or was it quite independent of it? If dependent on the tumour, it could practically only be caused by pressure, and this seemed hardly likely when the greater part of the tumour was in the lower half of the abdomen. I therefore rather inclined to the view that the pain and jaundice were independent symptoms and were most probably due to gall-stones. Against this was the absence of any enlargement of the gall-bladder or of any tenderness on pressure just below the tip of the eighth rib. The enlargement of the area of liver dullness, however, was quite consistent with the gall-stone trouble. The absence of any temperature, and the comparative freedom from pain, put aside the question of cholecystitis and of abscess formation, but even if these had been present it would not have accounted for the tumour below. I therefore thought that there were two distinct conditions present: first an old ovarian cyst, and secondly gall-stones.

As the biliary symptoms were the most important, I made an exploratory incision through the fibres of the right rectus about one inch outside of the middle line at the level of the umbilicus, intending to extend the incision upwards if gall-stones were present, but wishing to explore the lower swelling thoroughly to see if it had any connection with the liver. On opening the abdomen the right edge of the lower swelling was exposed and found to be cystic; this was palpated upwards, and was traced up to the under surface of the liver. My incision was then prolonged upwards, and the under surface of the liver examined. The gall-bladder and ducts were found to be healthy, but the common duct was adherent to the swelling. The condition was then diagnosed as hydatid cyst, and a hole was torn in the gastro-colic omentum opening up the lesser peritoneal sac. The cyst-wall was then exposed and the parietal peritoneum was then stitched to the cyst-wall round an area of about two square inches. A free incision in the area was then made into the cyst, which was found to contain closely

packed hydatid cysts, the size of small peas, with practically no fluid between them. They would not flow out, so had to be evacuated with a blunt spoon. About two quarts of these cysts were evacuated and a large drainage-tube introduced. The rest of the abdomen now was closed in the ordinary way. The patient did well for the first few days but developed some lung trouble. She had dyspnoea, dullness and absence of breath-sounds over the right base and fever. At first I suspected a subphrenic abscess, and put an exploring syringe into the chest without finding pus. The chest trouble, however, cleared up without any abscess formation, and

the patient made a good recovery. The discharge of cysts, however, has continued up till now, although the patient has gained flesh and the abdominal tumour has entirely disappeared. I have recently commenced treatment with thymol, and this, I hope, will be effectual.

These two cases show how difficult the diagnosis of abdominal tumour often is, and they also show that hydatid cysts may produce much more severe symptoms than is usually expected of them. With cases of such rarity it is often long before we are able to put into practice the experience gained by mistakes in diagnosis.

THE DIAGNOSIS OF ABDOMINAL DISEASES.

Being Notes of a Demonstration showing its Difficulty.

By WILLIAM TURNER, F.R.C.S.(Eng.), Surgeon to the Seamen's Hospital, Greenwich.

THE practitioners attending the London School of Clinical Medicine had before them on Monday afternoon an unusual series of cases exemplifying the difficulties of diagnosing various abdominal conditions. They had the further advantage of seeing how by careful, patient, and intelligent investigation the difficulties can be reduced or abolished.

ENTERIC FEVER.

One case was that of a young man aged 18, complaining of general diffused pain over the abdomen, which had lasted for 10 days. There was no indication of general peritonitis, the pulse was only 60, temperature 98°, and the pain was referred generally to the umbilicus. There was no localised muscular rigidity or distension and only some tenderness on deep palpation. Examination per rectum revealed nothing abnormal. Mr. Turner stated that occasionally one sees a case with pus free in the abdomen, yet with local symptoms, and occasionally the opposite is obtained—acute severe pain, distension of the abdomen, marked rigidity, and dullness in the flanks; yet, on operating, one finds merely the appendix inflamed and no general peritonitis present. These anomalous cases are usually under the influence of morphia at the time. In this case Mr. Turner thought that the patient had no urgent symptoms requiring surgical interference, yet still it was not easy to say what was going on; the patient had just been admitted to the hospital, and the case was one for careful watching, as a lad at his age does not get continuous pain for four or five days in the abdomen for no reason. A later examination demonstrated that the patient was suffering from enteric fever. The temperature went up and he had a typical enteric stool. The pulse kept slow, but of good volume. He was removed to the enteric ward.

LUMBAR ABSCESS.

Another patient complained of pain in the right side for six or nine months. He had no previous illness or family history of tubercle, and his age was 23½. The heart was normal, the urine 1030, acid, free from albumin and blood. He was a well-

developed strong-looking man, not like a patient in whom one would expect to find a movable kidney. The pain was all on the right side, and not on the left, and came on in attacks passing from the loin to the inner side of the thigh and drawing up the right testicle. On examining the abdomen, Mr. Turner was able to demonstrate a swelling on the left side occupying a large area, and not unlike an enlarged spleen. The patient had been abroad and had suffered from Malta fever. In the male three organs have to be considered in connection with such a swelling: first spleen, second kidney, third colon, and to these must be added in the female an ovarian cyst with a long pedicle. Mr. Turner next directed attention to the presence of fluctuation, which was well marked, and added that this case afforded an illustration of what specialists in abdominal diseases are wont to teach, that the patient may have symptoms on one side of the abdomen, while the diseased condition may be on the other. In this case, although the pain was right-sided, the swelling was on the left. The diagnosis of such a case is not at all easy. The condition may be caused by a cystic swelling of the left kidney—hydronephrosis, pyonephrosis, or cystic tumour. An abscess in the perirenal tissue also gives rise to similar physical signs, and in such circumstances the swelling should not move on respiration. This was then found to be the fact; and, on examining the spine, angular curvature was seen in the lower dorsal region. On questioning the patient again he stated that he had never had any injury, but he complained of jarring and pain on walking, thus confirming the diagnosis of tuberculous disease of the spine and that the swelling of the abdomen was a large lumbar abscess in connection with it. Mr. Turner pointed out that this case indicated the importance of examining a patient and trying to settle the diagnosis apart from the history. He added that the case had been mistaken for one of stone in the kidney owing to the so-called "renal pain" coming on in attacks, but the x-rays had failed to confirm this view. When the operation was performed an enormous abscess was emptied. The abscess extended down

to the iliac fossa and had the kidney in front of it at its upper part. It was thickly encapsuled in the so-called pyogenic membrane.

HYDATIDS OF LIVER.

Mr. Turner also had a case of a woman aged 43 and suffering from a large swelling in the left epigastrium. The swelling moved with respiration, and extended beyond the middle line for about three inches. It was tense, fluctuation could be felt in it, and the patient had a history of a previous operation for hydatid of the liver at King's College Hospital about ten years ago. The conditions commenced 15 years ago, when she was residing in Buckinghamshire. The cyst was opened by an incision in the left epigastric region. It was found to be very extensive, having a diameter of between eight and ten inches. There were no less than 16 generations or colonies in the cyst, and there were no adhesions to the anterior abdominal wall. The latter fact indicates the caution which should be used in aspirating a hydatid cyst either for purposes of diagnosis or cure.

SUPRAPUBIC OPERATION.

Another case presenting features of interest in examination was that of a man 71 years of age, and in poor condition, who had suffered from retention of urine. He had been able to get about with difficulty until quite recently, when the pain after passing water became more decided. The urine was normal, containing no albumen, pus, or blood. Mr. Turner suspected a large prostate, and possibly stone. He made a careful rectal examination and discovered tenderness at the base of the bladder just over the prostate. On passing a silver catheter a stone could be felt at the base of the bladder. An *x*-ray photograph was taken and also revealed the presence of a large stone. The suprapubic operation was undertaken for its removal by means of which about three-quarters of an hour was saved over lithotripsy, and it enabled the prostate to be dealt with if necessary. In a case like this Mr. Turner said that the bladder should be brought up to the skin, so that the great danger of the urine infiltrating the pelvic cellular tissue and setting up cellulitis is thereby diminished. The pain at the end of the penis, the absence of hæmaturia, and the frequency of micturition made him suspect stone. When hæmaturia is marked, malignant disease is the more likely diagnosis in a man of this age, but the microscopical examination of the urine will assist in the differentiation of the two.

A VACCINATION DIFFICULTY.

An important point with regard to re-vaccination has been settled by the Local Government Board. In a certain union a case of small-pox occurred. The guardians, being sensible persons, ordered the public vaccinator to re-vaccinate all who belonged to the family of the sufferer, and also those who lived near him or were supposed to have been in any way exposed to the infection of the disease. Among these were the patient's own children and some others who lived in close proximity to his dwelling. For these re-vaccinations the guardians paid, but

the district auditor, when he went over the accounts, disallowed the charge in the case of all children under ten years of age, and surcharged the guardians who had ordered the payment. His reasons for this decision were (1) Because there is no provision, statutory or otherwise, for re-vaccination under the age of ten years, and consequently no fee is payable for such operation; and (2) Because the payment made was not in respect of a debt legally due or recoverable from the guardians. Naturally the guardians involved referred the point to the Local Government Board, who took a common-sense view of the matter. They held that the circumstances were such as to render applicable to the case Section 28 of the Vaccination Act of 1867, which authorises guardians to pay out of their funds all reasonable expenses incurred by them in taking measures to prevent the spread of small-pox. Thus the incident closes in a satisfactory way. It would have been a distinct misfortune if a Board of Guardians so favourably disposed to preventive measures had been discouraged by such a surcharge. Now they and other boards will realise that in the matter of vaccination, where it is proved to be desirable, they have the support of the central authority.

OPIUM IN CEREBRO-SPINAL MENINGITIS.

SPECIAL interest attaches to an experience recorded by Dr. H. B. Currie, of Johannesburg, in the November issue of the *Transvaal Medical Journal*. The patient was a boy of ten years, in whom, on the third day of a febrile illness, mental dullness, retraction of the head, and Kernig's sign were recognised. Lumbar puncture obtained a milky fluid in which the specific micro-organism was found. On the eighth day a well-marked mottled rash appeared on the skin, and a favourable crisis was noted on the tenth day. Later, however, there was a return of the pyrexia, with severe headache and vomiting, but after some days these symptoms subsided, and the patient ultimately made a good recovery. In commenting on this clinical record, Dr. Currie remarks on the value of early lumbar puncture as an aid to diagnosis, and on the possibly favourable influence of the same agency in the scheme of treatment. But for the satisfactory termination of the case he gives the credit mainly to opium. This drug was given in large doses, and on the necessity for this Dr. Currie places the greatest emphasis. As much as one grain of morphine in association with atropine was given at a single dose, and in the course of 24 hours the patient received a total of not less than three grains of morphine, as well also as 10 minim doses of Battley's solution every six hours. The theory governing this procedure was that if the nervous system could be quieted down the responsible micro-organisms would in time develop sufficient toxin to check their further activity, and such a view can at least claim the justification of success. Repeated lumbar puncture and hot baths may have their value, but Dr. Currie gives a decided preference to opiates, provided these are given in full and repeated doses.

PRACTICAL NOTES ON DIAGNOSIS AND TREATMENT.

The Value of Inspection.

It is an important rule to look well at a diseased or injured part before manipulating it.—*Mr. Thos. Bryant.*

Pilocarpine in Threatened Mania.

In cases showing much mental excitement, and where such soporifics as opium and chloral have been known to fail, a hypodermic injection of nitrate of pilocarpine is often most successful.

Phthisis and Morbus Cordis.

THE prognosis of phthisis associated with morbus cordis is always good as to duration except in the rare cases in which the endocarditis takes on the malignant form. It is well known that the association of these diseases is uncommon.—*Dr. Percy Kidd.*

Chlorate of Sodium in Cancer.

SOME few years ago Dr. Brissaud, of Paris, reported several cases of malignant disease of the stomach treated with sodium chlorate; the dose varied from 2 to 4 drams in the 24 hours. He claimed very remarkable results in cases in which the disease had not extended to the liver or other organs.

Iodised Collodion for Ringworm.

THE following is recommended:—Dissolve 10 grains of iodine in 3 drachms of rectified spirit, add $1\frac{1}{2}$ oz. of collodion, Venice turpentine 24 grains, and castor-oil $\frac{1}{2}$ drachm. Apply to the affected area for 3 or four days, so as to cover with a thick adherent layer. Peel off in a fortnight's time, and wash the surface with solution of mercury perchloride (1 in 500).

Opium in Elderly Patients.

In elderly patients who are suffering from chronic ailments and general weakness of health, doses of opium given systematically at bed-time have a most beneficial effect, not merely in procuring sleep, but in acting as a tonic. Five grains of soap pill given at night, or even twice a day, will make these patients very much more comfortable and happy than any amount of stimulant.—*Mr. Christopher Heath.*

Hæmatemesis v. Hæmoptysis.

WHY it should be I cannot quite explain, but, clinically, it is the case that a moderate amount of blood from the stomach is far more likely to be accompanied by faintness, vertigo, or dizziness than the same amount from the lungs, provided, of course, the quantity lost is not so excessive as would induce a state of syncope, whatever its source.—*Dr. Allchin.*

Nitro-Glycerine in Epilepsy.

DR. ELLIOTT BATES has used nitroglycerine by hypodermic injection in cases of epilepsy. The dose employed was $\frac{1}{100}$ grain. The stage at which the medicine is employed is immediately after the establishment of the attack and when the patient is lying in a state of unconsciousness. It is claimed that the treatment secures prompt return of consciousness. Further, the after-effects of the attack are much diminished in severity.

Paracentesis in Ascites.

IN hepatic dropsy as soon as there is enough ascites to make you sure of not wounding the intestines it is time to tap. Drugs will act much better afterwards.—*Dr. P. H. Pye-Smith.*

Nocturnal Enuresis.

ONE method recommended in the treatment of this condition, in the case of boys, is to close the preputial orifice by applying collodion when the patient goes to bed. The layer closing the meatus can readily be removed with the finger when the patient wishes to micturate.

Tepid Sponging in Insomnia.

I AM often tempted to think that those who rush to antipyrin, sulphonal, phenacetin, etc., for the reduction of temperature, or for the production of sleep, have too little experience of the antipyretic and sedative effects of tepid sponging of the face, chest and neck, especially the carotid regions of the latter.—*Dr. F. J. Smith.*

Significance of the Cracked Pot Sound.

THOUGH it may often be obtained in phthisis pulmonalis this sound is not pathognomonic of that disease. It may be present in pneumonia and even in the upper part of the lung when the base is compressed by a pleural effusion. In the case of children it may be elicited over a perfectly healthy lung.

Treatment of Hæmorrhoids.

IN patients who live a sedentary life adequate exercise will often cure piles. A useful local application for hæmorrhoids which present externally is: Morphine 10 grs., tannic acid and extract of belladonna, of each 1 dram, lanoline and vaseline, of each 1 ounce. In internal piles, a good injection is sulphate of iron, 10 grs., in 1 ounce of water, injected warm after the bowels have acted.

Stimulation of Medulla Oblongata.

THE measure that has seemed to me to have most influence in stimulating and keeping up the functions of the medulla, is the hypodermic injection of a small quantity of strychnine, that is one-eightieth of a grain, together with a very minute, stimulant dose of morphine, about one thirty-sixth of a grain, and this repeated every two hours, if necessary.—*Sir Wm. Gowers.*

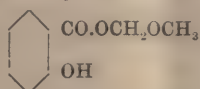
Treatment of Seborrhœa.

THE only thing which permanently succeeds in stopping this affection is absolute disinfection or sterilisation of the scalp. For this purpose the scalp should be treated for a few days with perchloride solution 1 in 1,000-2,000; an antiseptic soap may be used. Then, the next remedy to apply is sulphur, which has a most definite effect. What I generally prescribe is precipitated sulphur 15 grs., carbolic acid 15 min., vaseline 1 ounce. To this may be added a few drops of oil of lavender or oil of bergamot. The antiseptic washing should be repeated from time to time, say, once a week, and brushes, combs, hat-linings, etc., should also receive antiseptic treatment.—*Dr. Payne.*

REMEDIES AND THEIR USES.

External Medication in Rheumatic Affections.

THE number of substances which have recently been introduced into medicine for outward application no doubt testifies to a very natural desire on the part of patients for some drug which can be immediately applied to the seat of pain. Not only does the idea that pain can be relieved by some topical application appear logical enough, and so commend itself *a priori* to the sufferer, but there is a subtle psychic relief in direct local action which will be appreciated by all who have undergone, from whatever cause arising, the tortures of acute pain. Most of the modern applications are salicyl compounds, and their use is based on the view that they are of the nature of direct antagonists to the cause of the disease. Mesotan, which is one of the best known, is methoxymethyl ester of salicylic acid—



It is a clear fluid, practically without odour, hardly soluble in water, but easily soluble in oil and ordinary organic solvents. It is decomposed in the presence of water, and thus must be kept carefully stoppered. There is a considerable amount of evidence that mesotan is a valuable local application in acute rheumatism; it is, at any rate, no inert body, as the main objection to its use is that it occasionally sets up somewhat severe dermatitis. In order to avoid this, Weil, in 1904, recommended the following method of application: The mesotan is never applied pure, but mixed with an equal part of olive oil; two or three teaspoonfuls are to be applied with a brush or *lightly* rubbed in every day, and no impervious material is to be superimposed. With these precautions no accident will occur, except in a few cases of special idiosyncrasy. Many reports since the publication of this paper have confirmed the writer's statements. Some have had no ill effects when mesotan, combined with two or four times its weight of vaseline, was rubbed into the skin. This method has, however, been known to set up violent dermatitis. Not only has mesotan been applied to the painful joints, tendons, ligaments, and muscles in acute and chronic rheumatism, but it has also been found useful in facial erysipelas, in pruritus, in hyperidrosis, and in the night-sweats of phthisis. It has also been painted round the eye in rheumatic iritis, but in this case aspirin was also given by the mouth.

Esterdermasan, Rheumasan, and Rheumasol.

The first two bodies are salicylic acid compounds on a soap basis, forming an ointment which contains about 10 per cent. of the active ingredient. The last is a brown fluid consisting of 10 per cent. salicylic acid, 10 per cent. petrosulphol, on a petroleum basis. They have been successfully employed in cases of acute rheumatism, and also in the so-called "muscular rheumatism," lumbago, and obstinate sciatica. The skin may first be washed with alcohol and ether to increase its absorptive

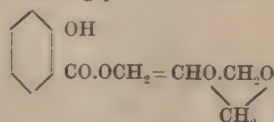
power. Behr (*Therap. Monatsh.*, 1904) strongly advises massage with rheumasan over painful parts, and has not observed any symptoms of irritation of the skin or renal disturbance after prolonged use. The daily inunction may reach 75 to 150 grains. Besides the various rheumatic affections, it may be used in phthisis, neuralgia, migraine, and dry pleurisy. Rheumasol is applied in a similar manner, or may be painted on with a brush; it is employed for similar affections. Esterdermasan has also been used in gynaecological conditions by Wolff (*Klin. Therap. Wochenschr.*, 1906) as an analgesic. In chronic and acute parametritis, perimetritis, oöphoritis, etc., the abdominal walls were rubbed with the substance, and gelatin capsules containing 75 grains were placed in the vagina.

Petrosal.

This substance, also known as velosan, is an ointment containing salicylic acid and salol in a special basis. Twenty-five per cent. of the salicylic acid may be recovered from the urine. The drug is said to be easily absorbed and non-irritant. It keeps well and has a pleasing odour; it has been used for rheumatic affections, and also in dermatology.

Protosal.

This is a colourless oily fluid, and is a compound of salicylic acid with glycerin-formal—



It is insoluble in glycerin itself, but can easily be dissolved in alcohol, fatty oils, or other organic solvents. Friedländer (*Therap. Monatsheft*, 1905) advises the following formula for application in rheumatic conditions:—

| | | | |
|----------------------|-----|-----|-----------|
| Protosalis | ... | ... | 50 parts |
| Spiritus vini. rect. | ... | ... | 5 parts |
| Ol. olivæ ad | ... | ... | 100 parts |

The above preparations can be obtained from Merck, of Darmstadt.

Pyramidon.

A proprietary title for dimethyl-amido antipyrin prepared by Meister Lucius and Bruning is a useful antipyretic which has been administered with very striking results in several typhoid epidemics in Germany, where it is believed to combine with antipyretic properties a considerable power of intestinal disinfection. Whether this is actually the case or not, the patients treated with pyramidon found the persistent headache in the early stages of typhoid very greatly relieved, and in many instances where insomnia was present the drug acted as a reliable hypnotic, while the temperature remained consistently lower than usual, even in the severer cases. Occasionally a red pigmentation is imparted to the urine by this drug, but there seems to be no pathological significance in the occurrence. As regards dosage 4 or 5 grains may be ordered to be taken every four or six hours, either in the form of powders or in water; it may also be obtained in tablet form.

THE BOOK WORLD OF MEDICINE AND SCIENCE.

DENTAL MATERIA MEDICA THERAPEUTICS AND PRESCRIPTION WRITING. By ELI H. LONG, M.D., Dental Professor, University of Buffalo. Illustrated with 7 engravings and 18 coloured diagrams. Second edition, thoroughly revised and enlarged. (London: Hodder and Stoughton.)

THIS work is dedicated to the memory of Dr. W. T. G. Morton, who first made known anæsthesia by ether. It is an attempt to classify into groups, and to give the action and uses of, therapeutic agents most likely to be useful to the dentist. The aim has been to cover what is essential and at the same time to supply in a concise form a broader view of the science of pharmacology. The work deals especially with the remedies and appliances which belong properly to dental medicine, forming a well-condensed text-book of therapeutics covering all the ordinary demands of the general practitioner and of the dentist. It deals with most of the subjects found in an ordinary work of general pharmacology, such as the constituents and preparations of drugs and their administration, as well as their mode of action. Depletives, counter-irritants, escharotics (under which the mineral and organic acids are treated of), the caustic alkalies, phenol, the silver salts, arsenious acid, are substances which receive special note under the heading of local remedies. We note in passing that the author precludes the use of iodoform in dentistry on account of its odour, but we have been unable to find a substitute that fulfils the same purpose in root-filling and with such lasting results. The uses of arsenious acid (*arsenii trioxidum*) in dentistry are tabulated very concisely, and the whole chapter is of special interest. After dealing with astringents and hæmostatics the work provides an important chapter on the cleansing agents, under the term detergents, and points out the adaptation of the alkalies and milder antiseptics to the cleansing of the mouth, teeth, throat, and nasal chambers, and of the stronger to the cleansing of foul ulcers, putrescent pulp canals, and such like matters. The chapter on antiseptics is particularly useful, and the paragraph on sterilisation should prove to be valuable to those practitioners who had not the benefit of practical training in aseptic work which the younger members of the profession are now acquiring at the various schools. Under the heading of local analgesics he mentions the various preparations employed to paralyse the sensory nerve-endings, and gives observations as to the dosage and mode of use of each. He illustrates the action of drugs by coloured diagrams which play a useful part in demonstrating the effect of the various anæsthetics on brain, spinal cord, heart, and the vascular and muscular systems. The whole work is rendered complete as a reference book by a very remarkable general index. The book is beautifully printed and thoroughly well illustrated. It is a safe guide to intricate problems which continually beset not only the student and dentist, but also the general practitioner of medicine. It will, moreover, be sure to find a place among the text-books of the dental student, and will be a valuable addition to those now in use at the different dental hospitals.

THE CLIMATE OF LISBON. By Dr. D. G. DALGADO. (London: H. K. Lewis. Pp. 50. 2s. 6d.)

AFTER the Peninsular War there was a period when Portugal enjoyed a well-earned reputation as a winter residence for invalids, and if it lost much of this reputation later, this was simply because many other places offered superior advantages, both in the accommodation provided for travellers and also in the greater ease with which these other resorts could be reached from England. Much has recently been done to remove these draw-

backs, and we shall be surprised if the Portuguese Riviera does not recover much of the favour it at one time enjoyed. The pamphlet under notice shows quite clearly how substantial are the claims now made for this delightful stretch of country; and Dr. Dalgado points out that the winter temperature of Mont' Estoril on the Bay of Cascaes is higher than that of several of the most frequented of the Mediterranean health resorts. For instance, during December, January, and February the mean temperature at Mont' Estoril is respectively 10.56°, 10.21°, and 11.13° Centigrade; while for the same months Nice is 8.24°, 7.36°, and 8.12°; and Catania, near Taormina, is 11.3°, 10.1°, and 10.9°; and what is of equal, or greater, importance, the diurnal variations are less at Mont' Estoril than in either of the other places named. Frost and snow are almost, if not quite, unknown at Mont' Estoril, and it is much sheltered from the winds by the Serra of Cintra and by the low-lying "Montes" of Estoril. Nevertheless, as we remarked in a former notice on Portugal, it is clear that the country must experience some of the Atlantic gales. The drainage at Mont' Estoril is said to be quite good, the water supply excellent, the air very pure, and there are pleasant walks along the shore and in the woods. On the occasion of a visit we made early in March we found the chestnuts and other ornamental trees in blossom, and the roses were in full bloom. There are two good hotels at Mont' Estoril, and we believe another is about to be built at Cascaes, which we think is a better site than Mont' Estoril. The Portuguese Riviera has one very great advantage over most of the other Continental health resorts: it is within forty minutes' railway journey of the capital of its country; and Lisbon is a very nice city to live near or to visit. One point cannot be overlooked, and it should have the immediate attention of the Spanish and Portuguese authorities. That is, a considerable acceleration of the train service from the French frontier, so that those invalids who dread the sea might travel overland in reasonable comfort. At present the journey entails upwards of sixty hours of direct travelling. From Southampton, Lisbon may be reached by the Royal Mail Line and from London by the Hall Line, or by the Booth Line from Liverpool or Hayre. The latter company offers very favourable terms to its passengers. Much information concerning Portugal may be derived from Dr. Dalgado's pamphlet, and intending visitors would do well to provide themselves with copies; but, we think it a pity that it could not be sold for less than two shillings and sixpence. Invalids should bear in mind that consumptives are not admitted to Portuguese hotels or boarding-houses, as consumption is looked upon as an infectious disease.

BOOKS RECEIVED.

A. AND C. BLACK.

"The Englishwoman's Year-book," 1907-8.

"The Writers' and Artists' Year-book," 1907.

J. B. LIPPINCOTT CO.

"International Clinics," vols. ii. and iii. Sixteenth Series.

MACMILLAN AND CO.

"The Health Reader."—I. By C. E. Shelly, M.D., and E. Stenhouse, B.Sc.

SMITH, ELDER AND CO.

"Climatotherapy and Balneotherapy." By Sir Hermann Weber, M.D., and F. Parkes Weber, M.D.

WARD, LOCK AND CO.

"Mrs. Beeton's Book of Household Management." (New edition).

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

CURRENT HOSPITAL TOPICS.

Paying Wards in Special Hospitals.

IN September of last year the Committee of St. Peter's Hospital for Stone, Henrietta Street, W.C., expended about £1,200 on an additional ward containing six beds for the accommodation of paying patients. The step was taken in consequence of the income of the hospital not being sufficient to support more free beds. Patients are admitted to the pay ward at a fee sufficient to cover the cost of its upkeep. That upkeep is reckoned at 10s. a day for each patient. The step was taken with the approval of the honorary surgeons, who give their services gratuitously to the pay patients, as they do in the case of patients admitted to the public wards. We direct attention to this new departure on the part of a special hospital, for it is well calculated to meet the needs of a most deserving class of patients, who prefer to pay what they can when they are compelled to make use of one of the hospitals.

Complimentary Dinner to Mr. P. J. Michelli, C.M.G.

A COMMITTEE has been formed, of which Mr. Perceval A. Nairne is the chairman, to suitably commemorate the honour of the Companionship of the Order of St. Michael and St. George conferred upon Mr Michelli a congratulatory dinner, at which ladies as well as gentlemen will be present, at the Trocadero Restaurant on February 15. It is further intended to present to Mr. Michelli a small memento as a tangible expression of the esteem in which he is held by a wide circle of friends and colleagues. The chair will be taken by Mr. Perceval A. Nairne. Mr. Michelli is widely and deservedly popular, and we welcome this movement to suitably commemorate so important an event in Mr. Michelli's career. The encouragement of eminent public service, rendered in the cause of hospitals and charities, by those who have had the best opportunity of appreciating its value, is a matter of the first importance to the well-being and efficient administration of these institutions.

St. George's Hospital.

THE quarterly Court of Governors on January 11 had under consideration the question of abolishing the open board in favour of an elected house committee. The agenda paper shows once more that some of the older governors are born obstructives. Their method seems to be to move the adjournment or postponement of every proposal submitted to a meeting when they happen to be present. We dealt with this attitude of mind in a leading article on July 7, 1906, and there is really nothing to add to what was then fully stated as to the injury which may be unintentionally done by tactics of this de-

scription. The truth is, that, when a man attains an age when he is incapable of further active work, he should retire from all business, including that of hospital management. We heartily congratulate Mr. C. L. Todd, the retiring secretary, on the motion to grant him a pension of £550 a year on the completion of a period of forty-five years' service at the hospital. All superintendents, secretaries, matrons, and other efficient officers who have devoted their lives to the interests of a particular charity, should be able to look forward to a pension, on their retirement. It is rather remarkable that the opportunity offered by the Royal National Pension Fund, which includes hospital officials of all grades, has not been more generally utilised to provide such pensions on a federation basis.

The Power of the Penny.

THE power of the penny has never been shown in a more striking manner than through the efforts of Mrs. Alfred Lucas on behalf of the Lowestoft Hospital. The success which has attended the League of Mercy, which in eight years has contributed £79,000, to the King's Fund, raised mainly by small subscriptions of 1s. a year and upwards, has evidently been taken to heart in Lowestoft. Mrs. Lucas found that there were 7,000 houses in Lowestoft, of which it was presumed 1,000 contributed subscriptions to the hospital directly or indirectly. Mrs. Lucas set herself to organise secretaries for districts and collectors for streets, with the object of asking the occupants of each of the 6,000 houses to contribute one penny a month to the hospital. In the first seventeen months £602 was raised from the 6,000 houses, being at the rate of 1½d. per month, or 1s. 6d. per annum. If a similar system were to be pursued in every urban community, the revenue from annual subscriptions to the local hospital might be easily and materially increased. It may be well to add a word of caution. In some places house-to-house collections have been pursued by all sorts of people for all sorts of objects, a system which is very justly resented by the householders. Each community might, very properly, in public meeting sanction a house-to-house collection, on Mrs. Lucas's plan, for the hospital, and at the same time resolve to request the police to put a stop to every street collection, for any other purpose, except it had been sanctioned by a public meeting of the residents.

Bristol and its Hospitals.

It has often been said that special efforts to raise funds for all the hospitals in a large city tend to diminish the contributions given to individual charities. We have held, as the result of many years' experience, that the view just stated, though

the popular view, is opposed to the facts. The truth is, that, every special effort, in a given community, whether on behalf of all the institutions, or on behalf of one particular institution, has a most beneficial effect upon the revenue of all by extending the area of givers, and so tending in the end, to increase their receipts, from voluntary sources. A somewhat remarkable instance of the truth of this contention has occurred at Bristol. There, Sir George White, the President of the Bristol Royal Infirmary, has succeeded in raising a fund of £50,000 for the extension and reconstruction of the buildings of that institution. This effort, which has extended throughout the year, is now completed, and it might have been thought that it would have

tended to diminish the contributions to the Hospital Sunday Fund, as the canvass for the Royal Infirmary was specially organised and continued with unabated vigour throughout the community. So far from this being the case, the amount received by the Hospital Sunday Fund, in Bristol, for the year, is the largest annual collection made, since the fund was inaugurated. Our congratulations are due not only to Sir George White, to the Lord Mayor and Council of the Hospital Sunday Fund, but to the inhabitants of Bristol, who have once more proved that, when a good object is properly brought before the notice of English people, it is sure to command their sympathies, and to receive their generous support.

A HINT TO COUNTY HOSPITALS.

POUND DAY AND ITS USES.

THE committee of the Royal Surrey County Hospital are to be congratulated upon the success which has attended the institution of a Pound Day in the county of Surrey on behalf of that institution. This success appears to be due in the first instance to the skill and organising ability displayed by Mr. John Eyre, chairman, Miss M. Traill, the matron, and Mr. W. T. Patrick the assistant secretary, who were assisted by a number of ladies and gentlemen in the towns and villages of Surrey which took part in the movement. Pound Day properly organised fulfils two useful purposes. First of all it has succeeded in the county of Surrey in arousing a novel and continuous interest in the county hospital on the part of between three and four thousand people who have taken part in the work. Next it has contributed 6,453 lbs., or nearly three tons weight of various articles which have been classified under sixty-seven heads, as given below, and has brought in £54 10s. 9d. in cash. The enthusiasm excited among the poorer members of the community, especially, cannot fail to have a beneficial effect upon the county hospital. It is not an easy matter to awake enthusiasm of this kind, but where it exists the energy it represents must in a measure reach those responsible for the administration of a hospital, and so quicken them to greater efforts and increased efficiency. Every individual who becomes interested in a hospital in this way is directly and personally benefited by being brought to realise that, after all, every healthy person ought to give a little of themselves each year in the cause of the sick. We would suggest that in organising a Pound Day every hospital should issue a circular indicating the articles which would be of most use. If this could be combined with an indication of the quality of each article suggested, and where it might be obtained, the results secured must be of the best.

The Surrey County Hospital secured one or more people in each village and country town to organise the work there and distribute the circulars from house to house, mainly with the aid of the school children. In this way a very general interest is excited, and the work and claims of the county hospital can be brought in a prominent way before all

classes to an extent never before accomplished. The success achieved by the Royal Surrey County Hospital is so great as to be almost, if not quite, unique in the history of Pound Days.

WHAT WAS GIVEN.

We take the following list of articles, and the places where they came from, from our contemporary the *Surrey Advertiser* which has helped the movement considerably by the publicity generously extended to it by the editors. The local Press can do much to make a Pound Day successful. The following list containing sixty-seven articles will be examined with interest:—

| ARTICLE. | lbs. | ARTICLE. | lbs. |
|---------------------|-------|------------------------------|-------|
| Tea | 507 | Flour | 358 |
| Coffee | 44 | Sweets | 21 |
| Cocoa | 86 | Macaroni | 9 |
| Sugar | 1,229 | Semolina | 12 |
| Sago | 151 | Flannel and linen | 8 |
| Tapioea | 355 | Toys | 23 |
| Rice | 721 | Vegetables | 115 |
| Currants | 211 | Potatoes | 192 |
| Raisins | 110 | Electric lamps | 2 |
| CornfLOUR | 92 | Cakes | 10 |
| Biscuits | 76 | Glycerine | 1 |
| Jam | 252 | Blue | 1 |
| Honey | 22 | Note paper | 1 |
| Marmalade | 98 | Potash | 1 |
| Pearl barley | 67 | Milk | 2 |
| Oatmeal | 18 | Linseed | 5 |
| Quaker oats | 35 | Wool and gauze | 5 |
| Soap | 27 | Mince meat | 3 |
| Soda | 414 | Wooden leg | 3 |
| Candles | 127 | Lentils | 2 |
| Starch | 35 | Pepper | 1 |
| Butter | 12 | House flannel | 2 |
| Mustard | 12 | Curry powder | 1 |
| Cheese | 5 | Shetland wool articles | 1 |
| Bacon | 12 | Rabbits | 3 |
| Apples | 176 | Preserved ginger | 4 |
| Syrup | 47 | Grouts | 10 |
| Peel | 7 | Bottle of brandy | 6 |
| Bovril, etc. | 15 | Safety pins | 1 |
| Plasmon | 6 | Bottle of disinfectant | 3 |
| Salt | 34 | Miscellaneous | 10 |
| Sultanas | 11 | Bread | 34 |
| Baking powder | 5 | | |
| Oranges | 100 | Total | 6,453 |
| Figs | 19 | | |

WHERE THE POUNDS CAME FROM.

It is interesting to see what the individual efforts of the towns and parishes produced. The table;

showing the names of the towns and villages and the amounts they contributed, is as follows:—

| | lbs. | | lbs. |
|----------------|-------|-------------|------|
| Guildford | 2,893 | Runfold | 131 |
| Witley | 515 | Send | 124 |
| West Clandon | 346 | Wood Street | 124 |
| Chiddingfold | 298 | Shalford | 121 |
| Farnham | 238 | Branley | 116 |
| Pirbright | 199 | Tongham | 111 |
| Puttenham | 167 | Marrow | 106 |
| Abinger Hammer | 161 | Stoughton | 100 |
| Farnborough | 136 | Ripley | 77 |
| Milford | 132 | Godalming | 68 |

| | lbs. | | lbs. |
|--------------|------|----------------------|-------|
| Cobham | 62 | Leatherhead | 32 |
| Dunsfold | 50 | Shamley Green School | 15 |
| East Clandon | 45 | | |
| Shere | 45 | Total | 6,455 |
| Compton | 41 | | |

On Monday, between the hours of ten and four o'clock, the gifts were on view to the public in the Board-room at the hospital, and a large number of people availed themselves of the privilege of making an inspection.

YORK CITY ASYLUM.

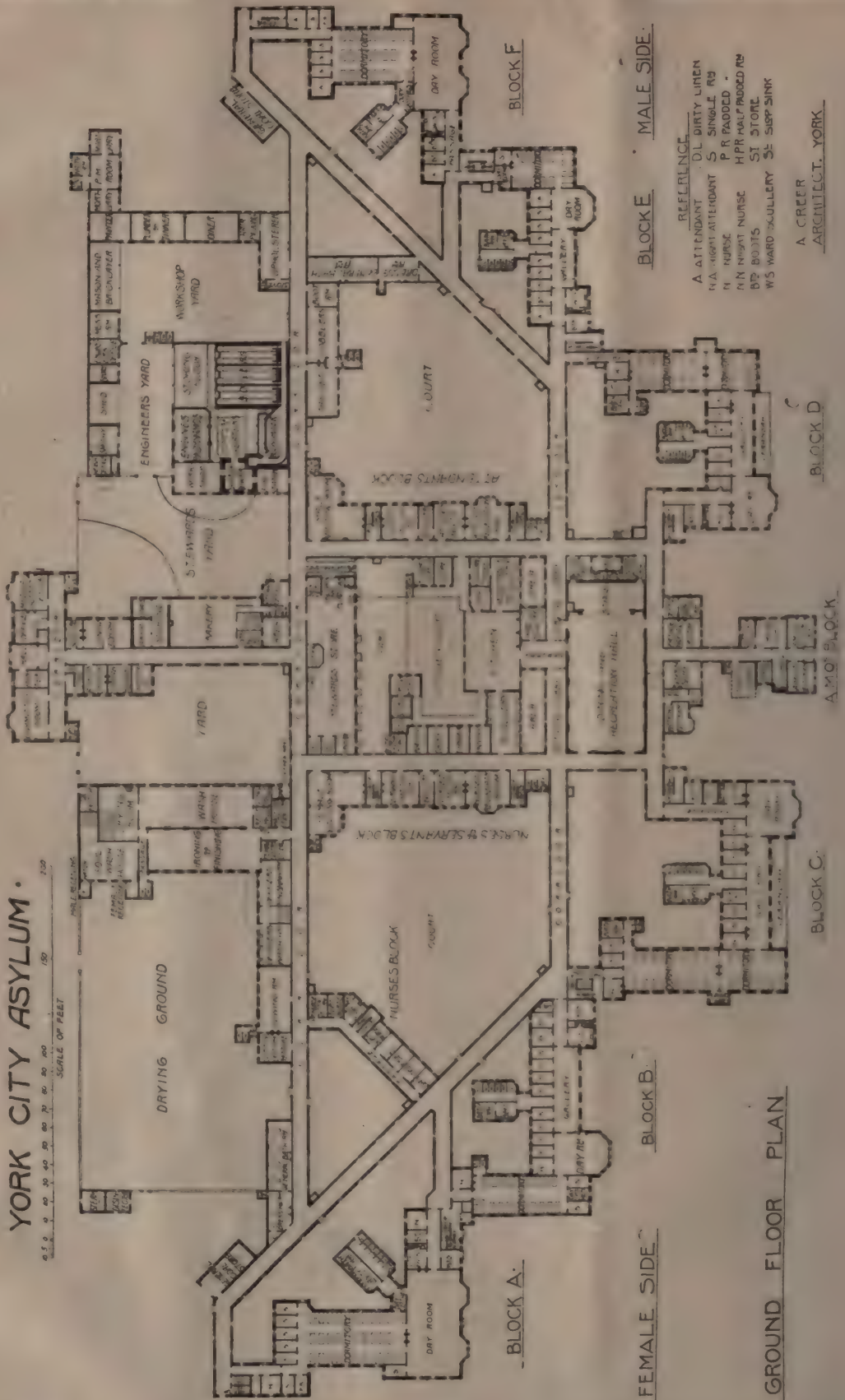
THIS asylum is built at Naburn, near York, and was opened during the year 1906. It contains 362 beds, but the administrative departments are large enough for about 486 beds. The aspect of the main buildings is south-east, which is a very good one for an asylum of this design. From the plans herewith published it will be seen that it is designed on the principle introduced to the asylum world more than a generation since by Dr. Asa Gray, of Buffalo; but most, or perhaps all, of the English architects inspired by Gray have cut off the apex of the broad arrow, thus obtaining a rather better frontage. By far the best example of this plan with which we are acquainted is the New Gloucestershire Asylum, in which the blocks are kept distinct; hence there is a better chance of free circulation of air. At York the blocks are contiguous, and thus is lost one great advantage of the block plan. As the asylum is a small one, and never likely to be a very large one, we think the architect would have done better by studying some of the older plans; bringing them up to date, rather than adopt this, at present, fashionable plan, because, as carried out, next to nothing is gained in point of separation; much is lost in point of supervision.

The centre block to the south contains rooms for the assistant medical officers. North of this small block are the dispensary, office, and pathological room; and to the left on entering, or west, but approached from the main corridor, is the matron's room. All these rooms and offices are conveniently placed, but we failed to notice any office for the matron, in the absence of which she must keep her books and see the nurses in her sitting-room. Further north than the main south corridor is the dining- and recreation-room, with a large stage and dressing-rooms at one end. This room is intended to serve a double purpose which in practice is never found satisfactory and could hardly be necessary in an asylum which cost the large sum of £360 per bed. Further north than this room is the kitchen department, placed within corridors arranged almost as a square, having at the extreme end the general store-room. The component sections of this department are well placed in relation to each other and to the blocks. West of the enclosing corridor, running north and south, are the mess-rooms and sitting-rooms for the female staff; and east of the other corridor are the corresponding rooms for the male staff. The female and the male visiting-rooms adjoin these respectively, and are approached from the main corridor and are within reasonable distance of the main entrance to the asylum. That entrance block occupies its best position to the extreme north. It contains committee-room, medical superintendent's office, assistant medical officer's office, chaplain's room, clerk's office, waiting-room and luncheon-room. We did not see any room for admitting patients in, unless it be intended to use the waiting-room for this purpose.

Returning to the main south corridor we enter a passage at

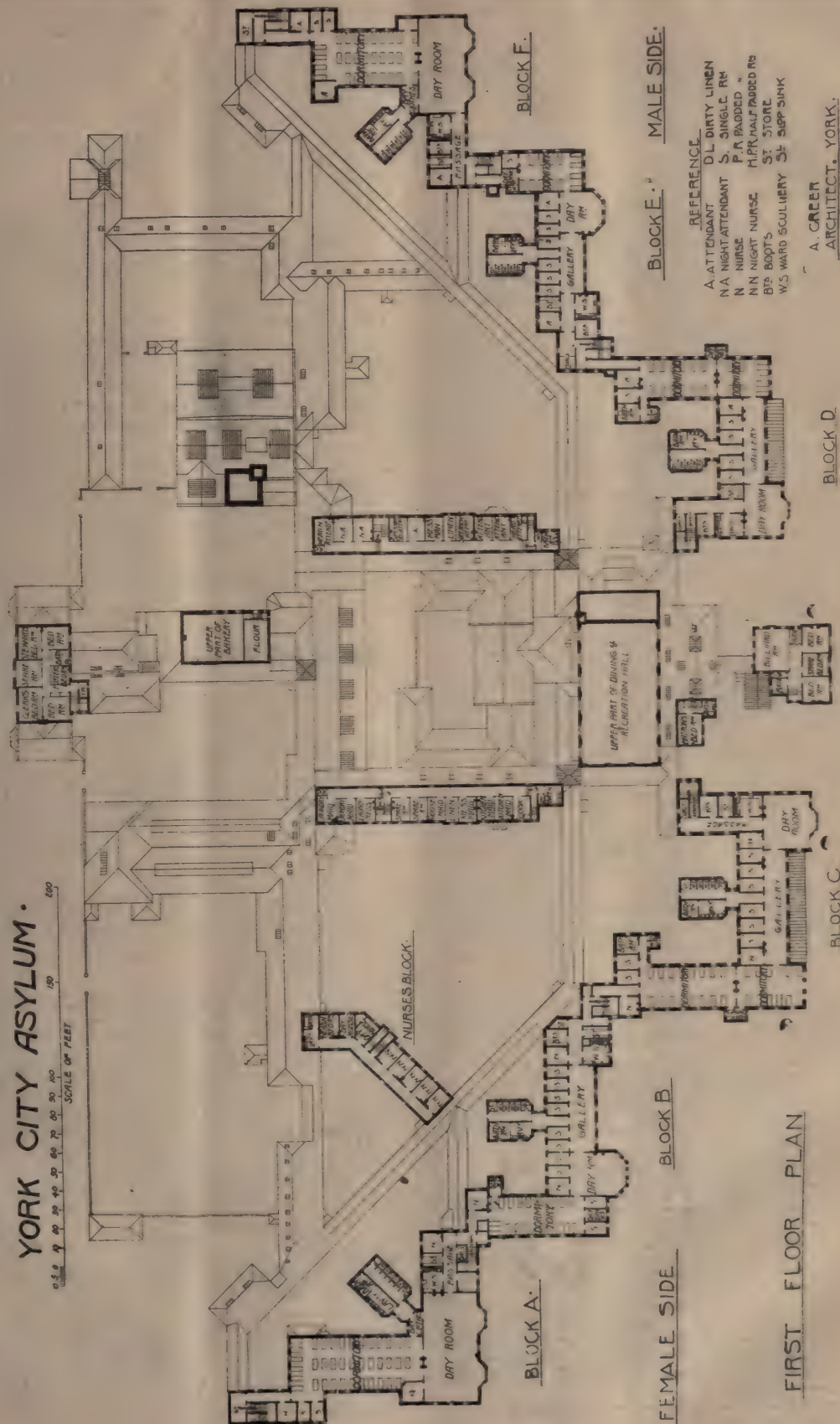
right angles to the corridor, and here is placed the main staircase to the block. Going southwards along the passage (female side) we find the boot-room, store-room, and the ward scullery, and then enter the day-room. This room is well lighted and has some cross-ventilation. It opens into a gallery having five windows and two glazed doors. In front is a verandah, and at the back are six single-bedded rooms, two nurses' rooms, and the entrance to the sanitary block, the latter being thus placed in an enclosed court and having some of the dormitory windows within 20 feet of it. The sanitary block is necessarily a two-story one; and it must obstruct much of the morning sun from the dormitory. The dormitory is approached from the gallery. It contains twenty-seven beds. The dimensions are not marked on the plan before us; but it would seem to be about 85 feet long and 23 feet wide, and with a 12 feet ceiling would give about 876 cubic feet of air per bed, an amount which is certainly small for sick patients. There is a fair amount of cross-ventilation in the dormitory, as only about one-third of the east wall is blocked; but then it is divided into two sections by a partition which to some extent must interfere with the free circulation of air. At the north end of the dormitory are bath-room, closet, two single-bedded rooms, and a nurses' room. Close to the latter is a passage leading to the staircase and to the main corridor running north-west. Here the design has one good point. It provides a staircase at each end of each block. There is no dining-room attached to this ward; and, as it is the infirm ward, most of the patients not actually bedridden must have their meals in the day-room, an arrangement which is quite indefensible. Others of the infirm class will, perhaps, be sent to the general dining-hall, a practice which is still worse than giving them their meals in the day-room. The six single-bedded rooms, which are to be occupied by sick patients possibly for weeks or months at a time, have a northern instead of a southern aspect; and surely this is a great pity. The first floor of this block is similar to the ground floor, except that there is no verandah.

The next block, westwards, provides accommodation for sixty recent and acute cases, thirty on each floor. The plan is a good deal like that of the first block. There are eight single-bedded rooms placed to the north on each floor, and only two on each floor are to the south, while space to the south for three others is wasted on a store-room and a boot-room. The gallery part of the ward has only five windows, all on the south side. The end of the day-room is formed by a large bay containing seven windows. Other windows it has none. One side is blocked by the dormitory; nearly all the other side by the gallery and the north end by the single-bedded rooms. Beyond the bay window there is not even an attempt at cross-ventilation, unless the doors leading to the dormitory and gallery be kept open or have open fanlights. The dormitory itself is fairly good as



YORK CITY ASYLUM.

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200
SCALE OF FEET



FIRST FLOOR PLAN

FEMALE SIDE

BLOCK B

BLOCK A

NURSES BLOCK

BLOCK C

BLOCK D

BLOCK E

BLOCK F

regards this point of cross-ventilation. Although this ward is intended for recent and acute cases, it, too, is destitute of a dining-room.

The adjoining block is for the epileptics and chronic patients. It has room for eighty patients, forty on each floor. On leaving the main corridor the ward is reached by a passage—apparently about 30 feet long. On one side of the passage are the staircase and boot-room, and on the other side are the nurses' room, scullery, and store-rooms; and we do not see how the passage obtains any direct light; but it may have sufficient borrowed light. The day-room is a fine room. It has to the south two large bay windows and on the west side are three windows; but one end is blocked by the adjuncts already named, and one side by the end of the dormitory and by a single-bedded room. The latter is, however, very useful in an epileptic ward. The dormitory has one end placed against the day-room, and the other is blocked by the single-bedded wards; but it has five windows on one side and four on the other, and there must be a fair amount of cross-ventilation, but the two beds nearest the day-room should be removed. The dormitory is about 57 feet long by 27 feet wide, and is probably about 12 feet high, and has 32 beds. Allowing a margin of error in measuring a small scale drawing, each patient would have about fifty superficial feet of floor space and about 600 cubic feet of air space. Of course these patients are out of bed by day, but even then 600 feet is not much, especially when, as in this case, the beds are placed three in a row across the dormitory. This ward, like the others, has no dining-room. Where are the epileptics to have their meals?

The night nurses' rooms are placed in one of the courts with the object of securing more quietude for them when in bed by day.

The laundry is placed to the north. It contains everything essential to a first-rate laundry—general washing-room, ironing-room, drying-room, foul-linen washhouse and drying-room, and there is also an officers' laundry.

Each side of the asylum is provided with a general bath-room. The power-house and the workshops occupy a site on the male side corresponding to that of the laundry on the female side.

The medical superintendent's residence is detached from the asylum. This is a most desirable arrangement and the architect is to be congratulated on seeing it. The chapel is also detached from the main building, but we doubt whether this is a good plan. It is more expensive to build and to keep up, entails more work on the part of the staff, and fewer patients are able to use it.

Electric light is used throughout. For the dining hall the plenum system of warming has been used; but other

parts are warmed by open fireplaces and by steam coils. All the pipes are carried in suitable channels placed under the corridor floors, and workmen are enabled to reach them from the outside. The sewage is connected with the Corporation works, and the water is provided by the York Water Company.

The architect was Mr. A. Creer, of York, and the contractors for the buildings were Messrs. Longden and Son. The cost is given as £130,000, but it is not stated whether or not this included the site.

THE HOSPITAL LIBRARY AND CHARITIES BUREAU.

This institution has been founded as a centre of reference in all matters concerning the establishment and management of charities. It is open to all interested in the subject on payment of a small annual fee, and inquiries by members can be made by post. Write for prospectus to the Librarian, The Hospital Buildings, 28 & 29 Southampton Street, Strand.

Inquiries of the Librarian are answered in this column free of charge. Inquiries to be answered promptly by post must be accompanied by a fee of 2s. 6d.

THE Royal Academy of Medicine in Ireland has moved its offices to 6 Kildare Street, Dublin.

Medical and Administrative Appointments.

THE ROYAL NATIONAL HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, VENTNOR, ISLE OF WIGHT.

TWO ASSISTANT RESIDENT MEDICAL OFFICERS REQUIRED. Salary £200 with Board and Lodging in the Hospital.

Every Candidate must be doubly qualified, registered, and unmarried. He must have knowledge of Bacteriological methods.

Applications in candidate's own handwriting, stating his age and qualifications (with one copy of three recent testimonials, may be sent at once to the SECRETARY, 34 Craven Street, Charing Cross, London.

THE URBAN DISTRICT COUNCIL OF ABERDARE. APPOINTMENT OF MEDICAL OFFICER OF HEALTH.

The Council of the above district invite applications for the above appointment from duly qualified medical gentlemen holding the Diploma of Public Health.

Age not exceeding 45.

Welsh desirable.

Canvassing, directly or otherwise, will be an absolute disqualification, but candidates are at liberty to forward copies of their applications and testimonials to members of the Council.

The area of the district is 19,127 acres, and the estimated population about 48,000.

The gentleman appointed will be debarred from Private Practice, and required to devote his whole time to the duties of his office.

Undertake the duties, charge, and control of the Infectious Disease and Isolation Hospital.

Perform the duties of Medical Officer of the Local Education Authority, and generally perform such other duties as the Council and Education Authority shall from time to time require.

The salary will be £500 per annum, which will be allocated as follows, viz.:

| | |
|---|------|
| As Medical Officer of Health | £240 |
| As Medical Attendant and Superintendent of Hospital | 40 |
| As Medical Officer to the Education Authority | 60 |

£300

The appointment will be made on the 11th day of FEBRUARY, 1907, and duties will commence on the 1st day of APRIL, 1907.

The appointment in the first instance will be for a period of TWO YEARS, and will be subject to the approval of the Local Government Board.

Further particulars as to the duties, qualifications, and conditions of appointment may be obtained from the undersigned.

Applications, stating age, present occupation, experience, and qualifications, with copies of not more than three recent testimonials, to be delivered under seal to me, endorsed "Medical Officer of Health," not later than the 23rd day of JANUARY instant.

THOS. PHILLIPS, Clerk.

Town Hall, Aberdare.
January 9th, 1907.

(500)

NOTICE TO CORRESPONDENTS.

ALL MSS., Letters, Books for Review, and other matters intended for the Editor should be addressed THE EDITOR, "THE HOSPITAL," THE HOSPITAL BUILDING, 28 & 29 SOUTHAMPTON STREET, STRAND, W.C.

The Editor cannot undertake to return rejected MS., even when accompanied by stamped directed envelope.

Notice to Advertisers and Subscribers.

All Advertisements, Orders for Copies of THE HOSPITAL, and Business Communications should be addressed to THE MANAGER (Not to the Editor), THE HOSPITAL, 28 & 29 Southampton Street, Strand London, W.C.

The Cost of Subscription, post free, is as follows:—Per week, 3d.; per quarter, 8s. 3d.; per half-year, 16s. 6d.; per annum, 32s. Foreign and Colonial:—Per annum, 19s. 6d., payable, in all cases, in advance.

NOTICE.—Vol. XL of "The Hospital" (April to September 1906), in handsome cloth binding will shortly be on sale at the office of this Journal price 10s. 6d. Cases for binding the Numbers contained in this Volume 2s. Index to Vol. XL, 3d., post free.

The Monthly Part for January is now ready. Price 1s., by post, 1s. 3d.

The Hospital

A JOURNAL OF

The Medical Sciences and Hospital Administration.

VOL. XLI.—No. 1,062.

SATURDAY, JANUARY 19, 1907.

THE LIMITATIONS OF SURGERY.

IN the thirty-fifth book of his *Natural History* Pliny tells the story of Apelles and the cobbler where the painter made the stinging retort, "Ne sutor supra crepidam" to the son of Crispin's criticism. The retort passed into a proverb, and the proverb at the present time is in urgent need of application in connection with the popular treatment of medical subjects. The amazing rubbish which the editors of substantial newspapers allow their subordinates to write and publish upon medical topics is almost beyond belief. Compulsory education has taught an enormous number of people in this country to read and write, but it has not yet gone far enough to teach them to think, or even to exercise such critical faculties as they may naturally possess. A loose statement, or the hyperbole of an eminent man is published with as little comment, and often with greater display, than the most accurate and closely reasoned utterances. During the past week the *Daily Chronicle* has signalled itself in this manner on two occasions. In its foreign correspondence it quotes a saying of Professor Posner of Berlin that in future surgeons will find no difficulty in attaching a decapitated head to the trunk provided the operation be carried out with sufficient rapidity, whilst it predicts that the time will come when surgeons will be able to attach an artificial arm or leg to the body in place of the limb which has been amputated, so that the outlook of "surgical possibilities is enough to make one dizzy."

Such statements are as harmful to the ignorant as they are ridiculous to those who know. They are harmful because they are untrue. An editor of a great daily has many difficulties to surmount, but he should at least be able to control his correspondence. Where, however, editors claim that they have failed to appreciate the falsehood, they are clearly unfit for the responsibilities which attach to their office in a free country like England. They are ridiculous because it is apparent to everyone, who knows even the elements of anatomy and physiology, that no surgical procedure could ever allow of the immediate union of all the complex tissues severed in a beheadal or amputation, and it is only by instant repair that life could be preserved in such cases.

Surgery is strictly limited in its methods and in its results by the fundamental facts of life. To the novice the recent advances in surgery appear stupendous, but to those who know the history of the art, it is apparent, that, all the modern operations of which we are so proud were done by our predecessors—the only difference being that what they did occasionally, and by accident, we do regularly and by design. In the higher animals no organ or complex tissue can be wholly removed from the body, even for a moment, and yet live. The very exceptions are only apparent exceptions and prove the rule. When a piece of bone is grafted into a fracture, when a nerve or tendon is spliced into a nerve or tendon, and when a skin grafting is performed with seemingly good results, it is not the extraneous bone, nerve, tendon or skin which becomes incorporated. These structures serve simply as a scaffolding along which the new tissues grow. They give the line of direction and they may even afford the necessary stimulus, but when they have served their purpose they are carried away piecemeal, and leave not a wrack behind. Surgery, therefore, is not joinery, just as it is not butchery.

Many a good surgeon would make a sorry carpenter or a bad butcher—for surgery demands a very intimate knowledge of the phenomena of life, as they are manifested, both, in health and disease. The work of John Hunter and his pupils, long ago, showed, how far removed is the science from the art of surgery. The art of surgery was carried to an acme by Cheselden, and many a one besides, but they had no science. It was left for Hunter to show that scientific surgery depended directly upon pathology, and for the Hunterian school, pathology was morbid anatomy and experimental physiology. The surgeon, who best knows the course taken by disease, obtains the most satisfactory results in his practice. He alone can forecast and, by forecasting correctly, can anticipate, complications. A knowledge of morbid anatomy was, therefore, of immense advantage to surgeons. At a later time, bacteriology developed as a branch of pathology, and the hand of the surgeon was still further strengthened, for he was then able to become prophylactic, and

by recognising the cause of his failures to avoid them. By these means, surgery has attained its present position, and there is reason to think, that, it can still advance along many paths, but until the

secret of life is disclosed, as a result of work proceeding from the physical and chemical laboratories of the world, the limitations of surgery are definite and final.

RESEARCH VERSUS TEACHING.

IF we are to accept their own definitions, the immediate responsibilities and duties of those who hold the chief places in the medical schools of our Universities and hospitals, are two in number. Of these, the one is teaching; the other, research. So far as we know, no one is the least inclined to quarrel with this statement of the case. To endeavour to add to the sum of existing knowledge, and to communicate that knowledge to the next generation, with all that pertains to these exhilarating ambitions, may therefore be accepted as the recognised and acknowledged academic programme. In these circumstances, the only criticism which can possibly arise must refer to the efficiency, or otherwise, with which that programme is carried out. On such a point the outside critic is necessarily at a disadvantage, and may more or less readily be pushed to one side. But the attention which is denied to an outsider will be readily granted to those who speak from within the charmed circle of academic privilege, and from such sources it is possible to glean some hints of the attitude assumed by some of our collegiate authorities towards their acknowledged duties.

From many utterances of the order to which reference is now made, it is obvious, even to the least interested, that in recent years there has been a marked and increasing tendency to exalt the duty of research at the expense of the teaching function. The latter, we are told, may be met by text-books, or may be left in the hands of those of junior position and experience. The special duty of the head of a department is to engage in new inquiries intended to enlarge the boundaries of known truth, and to acquire a reputation for original observation and work. From the same source, and from this alone, are to be obtained glory and praise for our academic institutions, the strength and value of which are to be constructed, not in their class-rooms, but in the private laboratories of their professors. The duty of teaching, in short, is described not merely as of entirely secondary importance, but as an irritating interference with the more urgent and noble claim of original research.

In considering the question so presented, it is not in the least necessary to say anything in depreciation of research. The importance of this is universally allowed. It is equally allowed that every man's responsibility in this direction is measured by the amount of his opportunity. Therefore, the protest of those with whose attitude

we are now concerned, that much is to be expected from them, is here fully and freely admitted. But it may be questioned whether their zeal to discharge one set of duties can be held to be a valid excuse for an attempt to avoid responsibilities having at least an equal claim. It must be remembered that to a very large extent the income of our medical schools is derived from the fees of the students, and that these fees are paid by those who present themselves as pupils to be instructed in the proper business of the profession they have selected. Upon the most elementary ethical principle this money must be used for the purpose for which it is paid, and hence the very first duty of those who accept it, is to provide the teaching for which they receive the fees. If original work and research should be encouraged, and no one questions this, let them be encouraged in a declared and straightforward fashion. But no excuse can be found for a proposal to take money for one purpose and to use it for another.

Whilst, however, we say that the primary duty of those who accept students' fees is to supply the teaching for which they are paid, we, at the same time, dispute the suggestion that such a procedure is inconsistent with devotion to original work. The fact is that if a man has the root of the matter in him he will be an original observer in any circumstances, and that, speaking generally, the teachers in our medical schools have quite exceptional opportunities in this direction. They have material, they have resources. In some cases, not, alas! in all, they have a fair income, and a certain provision for the future. The amount of teaching work that is demanded from them is, at the outside, not more than an hour or two a day, and this only for about eight months of the year. To hear, in such circumstances as these, a professor publicly bewailing his inability to carry on successfully the practice of original work because of the demands made on him as a teacher, is apt to provoke cynical and sarcastic comment. Evidently what is wanted is an increased appreciation both of the importance, and of the responsibility, of teaching. This granted, there will be no desire to escape from its obligations and to pass these on to members of the junior staff. And in any event, whilst from those who have large opportunities for observation and experiment much is properly required, this expectation is not inconsistent with the demand that they should fulfil their work as teachers. Let them learn to do the one, and, also, not to leave the other undone.

ANNOTATIONS.

The Indigestibility of Plummer's Pill.

THE necessity for constant attention to the niceties of pharmaceutical combination in the prescribing of drugs, is well illustrated by the communications on the subject of Plummer's pill recently addressed to the medical and pharmaceutical Press by Sir James Sawyer. In treating a patient with some pills made according to the official formula Sir James noticed that no physiological effects were produced, and this led to an examination of the stools and to a discovery of the fact that the pills had passed through the alimentary canal without change. Further tests showed that the pharmacopœial formula yielded pills which could be digested in water for thirty-six hours at a temperature of 100° F. without being affected. It is suggested that this is due to a combination between the resin of guaiacum and the alcohol, the latter being one of the excipients ordered in the Pharmacopœia. In this way it is believed there is formed a resinous mass which causes the rest of the ingredients to "set" into so firm a substance as to resist the action of the gastro-intestinal fluids. Important as this is in itself, it becomes of still more importance in view of the proposal to omit in future the castor oil now used in making up the pill, and to use alcohol as the sole excipient. Sir James Sawyer has referred to Dr. Plummer's original formula and finds the excipient (if so it may be called) there ordered to have been "balsamum capivi." Even this, however, does not yield a pill which readily undergoes disintegration. After various trials Sir James has come to the conclusion that the best excipient is "syr. glucosi," and he accordingly advises the following formula: Calomel, sulphurated antimony, of each 1 grain, guaiacum resin, 2 grains, syrup of glucose, a sufficiency.

Intestinal Parasites and Pernicious Anæmia.

THE possible mischief which may result from the presence of parasites in the human alimentary canal has always been a difficult clinical problem. On the one hand is the undoubted fact that in numbers of instances in which such parasites are present the health of the host appears in no way disturbed; on the other, it is certain that in many cases serious and even alarming symptoms have promptly subsided on expulsion of some variety of parasite. For the most part, such symptoms, when they have existed, have been attributed to the directly irritating effects of the parasite upon the nervous structures of the intestine, there being produced in this way central or reflex nervous disturbances. More recently it has been suggested that in place of, or in addition to, this mechanical irritation, an intestinal parasite may prove harmful to its host as a result of the absorption of some secretion manufactured by the parasite. It has even been held that the anæmia associated with such a parasite as the ankylostoma duodenale is to be explained in this fashion, rather than as a result of loss of blood following the damage inflicted by the worm on the intestinal mucous membrane. Dr. Bilderbeck Gomess has now somewhat modified this position. He accepts

the view that ankylostoma may be directly responsible for severe anæmia and even for a variety of pernicious anæmia. Bothriocephalus latus, which has been accused on a similar indictment, he discharges with a verdict of "not proven." At least he does this so long as the parasite is healthy. But if in its turn the bothriocephalus is the victim of parasitism, that is, if it is affected with gregarines, another state of matters arises. Further, the ascaris lumbricoides may become infected in similar fashion, and then, equally with the bothriocephalus, may be associated with pernicious anæmia. The existence of gregarines in man has been generally denied, but Dr. Gomess combats this statement. He affirms, on the contrary, that they occur in considerable numbers when associated with ascaris lumbricoides, that is to say, when the ascaris is itself infected with gregarines.

The Cure of "Sleeping Sickness."

PROFESSOR KOCH, who has recently turned his attention to sleeping sickness, has published a series of reports on the subject, his last one putting forward the claim that "atoxyl," an arsenious preparation, will probably prove as efficacious a specific in the case of sleeping sickness as quinine is in that of malaria. Before entering into a discussion on this statement, it is as well to state that the use of "atoxyl" in trypanosoma infections is not new. The Liverpool School of Tropical Medicine have been using this drug in the treatment of animals infected with trypanosomes for a considerable time, and have published their results, which on the whole are satisfactory. If, then, the drug proves to do good in human cases the merits of the discovery do not go to Koch, but to the school already mentioned. As to the statement that it will prove as efficacious as quinine is in malaria, one must reserve one's opinion until at least years have elapsed. Koch, in his report, admits this to a certain extent, but the times he gives are manifestly too short for any degree of certainty to be obtained. For example, he writes: "In two or three months, according to circumstances, we hope to see the complete cure of the majority of the patients. We must then keep them under observation for an equal length of time to see if relapses ensue. It will only be when we are sure that the cure endures after the administration of atoxyl has ceased, that we shall be able to regard our problem as solved. That the prevention of the disease will follow the cure of the sufferer is obvious." To anyone who has studied sleeping sickness closely, this dictum of Koch's is at once seen to be far too optimistic, much of the same type, in fact, as his idea of stamping out malaria by the universal giving of quinine. That arsenic and arsenical preparations do good is undoubted, and this is of course an advance; but European cases heavily drugged by arsenic, though having their lives prolonged, have eventually succumbed to their malady, in some cases years afterwards. With this before us, then, it is well to receive Koch's statements with caution, and to withhold an opinion till the necessary time for testing it has elapsed.

MEDICAL OPINION AND MOVEMENT.

RONTGEN RAY operators are still sadly in need of some standard of measurement for x -ray effects. This is especially necessary for the comparison of the effects upon the tissues, so that different operators may be able to form a definite idea of the variations in each other's work, or in their own work under different conditions. A committee has been formed by the Röntgen Society to investigate the matter, and, if possible, to devise some method of standardisation. In a recent address on the subject the President of the Society, Mr. C. V. Boys, F.R.S., has emphasised the many difficulties of the task to which they are committed. A standard of absolute units expressed in the C.G.S. system would be the ideal one, but this appears altogether beyond our reach at present. There is no known relation between the total energy of the rays or their heat of absorption, and their therapeutic, chemical, or photographic effects, and these effects vary for the different wave lengths, so that it is not possible to express the measure of the effects in terms of heat units. In order to provide an absolute standard it will therefore be necessary to determine exactly what physical property or properties are responsible for the different phenomena. In the meantime we shall have to content ourselves with some arbitrary standard. This, however, is a problem of sufficient difficulty. Vacuum tubes are found to differ in respect of many qualities, such as the "hardness" or "softness" of the x -rays they emit, and one effect as observed on the skin seems to have no relation to other effects measured by various instruments. The hope of a solution to the problem appears to lie in the discovery of some definite relation between the effect of the rays on the tissues and some special physical manifestation.

HYPNOTISM cannot be said to have yet received formal and authoritative recognition as a therapeutic measure by the profession. It has been found difficult to differentiate the purely scientific phenomena of the hypnotic sleep from the charlatanism and trickery that have grown up around the subject. Misconceptions and prejudices have undoubtedly done much to prevent a proper estimate of the worth of hypnotism. In spite of many able exponents among members of the medical profession both here and on the Continent, there is still a large proportion of medical men who look askance at its practice. In New Zealand the subject of hypnotic treatment has been recently brought before the profession at the Medical Congress by Dr. P. Clennell Fenwick, surgeon to the Wanganui Hospital. He has only used hypnotic suggestion in his practice during the past year, but in that short time he claims to have achieved some notable results. Cases of asthma, constipation, chorea, psoriasis, as well as various neuroses, have yielded to the charm of hypnotic suggestion. In addition to these interesting curative phenomena, Dr. Fenwick was able to produce a photograph of a hand showing two blisters raised by

suggestion during the hypnotic sleep. This experiment was performed by Dr. Otto G. Wettestrand. The blisters appeared seven hours after the suggestion, and it is stated that four Swedish physicians were present during the whole time. This ability to produce a blister by hypnotic suggestion has been claimed by a few operators from time to time, but the evidence has not been considered altogether free from criticism. Indeed, such an experienced operator and authority as Dr. Bramwell states that he has never been able to produce this phenomenon, and throws considerable doubt upon the possibility of its achievement. If mental suggestion can actually produce such a lesion of the skin, there seems no reason why such a power should not be utilised to remove existing disease.

At the recent opening of a new wing to the National Maternity Hospital in Dublin, his Grace the Archbishop of Dublin took the opportunity to comment on the inequitable distribution of the parliamentary grant to the Dublin hospitals. It is unfortunately one of those Irish grievances which, in spite of repeated commissions of inquiry, and in spite also of definite recommendations of reform, remain undressed. As stated by his Grace the Archbishop, the facts of the case are that of the £15,850 of public money voted by Parliament every year as a State subvention to the hospitals of the city, every penny is bestowed upon hospitals exclusively or predominantly Protestant, the claims of the Catholic hospitals being entirely ignored. It is further alleged that such is the sectarian spirit pervading the controlling hospital authorities that the position of master to the Rotunda Hospital is a post to which no Catholic doctor would have the slightest chance of being appointed. The only proper basis for distribution of public money to the hospitals is one calculated in accordance with the amount and quality of work carried out by them, provided they administer to any of the community in need of their assistance, and independently of religious persuasion. The reform of a system of distribution already in existence for a considerable period doubtless presents many questions of difficulty. To cut down supplies to certain institutions, after they have depended upon these for so many years, would inflict upon such institutions more severe hardships than if they had never been recipients of the grants, and might in many cases seriously curtail the good work they are doing. The only alternative would be to increase the amount of the subvention to such a sum as would allow of a proportionate distribution to those hospitals not now included in the grant. Any additional grant must however depend upon the relative average efficiency of every institution included in the list of recipients. No grants ought to be made except they are based upon the report of competent inspectors who have visited each hospital and are able to judge the quality of the work and management.

HOSPITAL CLINICS.

A LECTURE ON SYPHILIS OF THE NERVOUS SYSTEM.

By E. FARQUHAR BUZZARD, M.A., M.D. Oxon., F.R.C.P. London, Assistant Physician to the Royal Free Hospital, the National Hospital for the Paralysed and Epileptic, and the Belgrave Hospital for Children.

GENTLEMEN,—I think we shall all agree that syphilis plays a very important rôle in diseases of the nervous system, and that that rôle is not always a direct one. The subject of my lecture to-day is really confined to the direct manifestation of syphilis—the specific lesions—in the nervous system, but I may remind you that syphilis is an important etiologic factor in the production of ordinary arteriosclerosis, a disease which is closely associated with cerebral hæmorrhage, cerebral thrombosis, pathologically high arterial tension, and other conditions, all of which give rise to symptoms of nervous origin.

Indirectly, too, syphilis plays a most prominent part, probably through its toxins, in the causation of the so-called “parasyphilitic diseases,” of which tabes dorsalis and general paralysis of the insane are the commonest examples. In these morbid processes we do not find specific lesions, but chronic degeneration.

In a third indirect way syphilis is able so to influence the development of the children of syphilitic parents as to lay the foundation of several mental and paralytic diseases. Juvenile tabes and juvenile general paralysis are probably less common results of inherited syphilis than are some less sharply defined forms of mental defect and physical paralysis. On the other hand, there has been in the past a tendency to blame syphilis too much as an ætiological factor. We have no reason to associate it with such common diseases of the nervous system as disseminated sclerosis, progressive muscular atrophy, or amyotrophic lateral sclerosis.

Passing from the indirect to the direct syphilitic lesions of the nervous system, the first point to which I wish to draw your attention is the fact that syphilis exerts its influence practically always and entirely upon the *central* portion of that system. It is true that a peripheral nerve may be accidentally involved in a gummatous growth in any part of the body, but it is doubtful whether we can certainly describe a syphilitic peripheral neuritis. If there is such a condition, comparable to other forms of polyneuritis of toxic origin, it is certainly a very rare disease.

When I say that the central nervous system is the site of specific lesions I mean the whole of it,

and do not desire to draw any distinction between the brain and the spinal cord. These may be regarded as one organ in this connection, for the lesions of both are of the same nature and the symptoms evoked only differ in accordance with the difference in function of the parts involved.

The next point is, what are we to call a syphilitic lesion of the nervous system? It has gone out of fashion to draw a sharp line between secondary and tertiary manifestations, and such a distinction is specially inapplicable to the nervous system, because the appearance of identical morbid conditions may be noted within a few months of the primary infection, or may be delayed until a few or many years later. Probably 60 per cent. of syphilitic lesions of the nervous system occur within five years of the chancre. In my experience the cases in which the onset of nervous complications has been exceptionally early have mostly been in young people, but I know of no statistics bearing upon this particular point. Speaking generally, there is no evident association between the severity of the primary sore and the development of the symptoms pointing to gummatous disease of the brain or cord. There are certain general characteristics which apply equally well to cerebral and to spinal syphilis. The most prominent of these is the frequency of multiplicity; often, for example, a gumma of one part is associated with an arterial thrombosis of another. In the same patient we may have evidences of a basal meningitis, and of a cerebral and a spinal thrombosis. The development of each lesion occupies as a rule only a few hours or a few days. A slowly progressive course is rare, except in some cases of syphiloma of the cerebral hemisphere. A third characteristic is the readiness with which syphilitic lesions yield to appropriate treatment, and the readiness also with which they spring up in the same or another situation if neglect of continuity of treatment is displayed either by the doctor or his patient.

We must refer to morbid anatomical facts for the purposes of classification. All syphilitic lesions of the central nervous system arise either in connection with vessels or in connection with the meninges. It is probably true to say that the involvement of cerebral or spinal substance proper is always secon-

dary. Whether the origin is arterial or meningeal the histological process is initially much the same. In either case the first evidence of lesion is a round-celled infiltration of the tissue, which later tends to the formation of fibrous and caseous masses. According as to whether the process is diffuse or local, we may find a diffuse meningitis or a local gumma, or local gummatous arteritis. Probably the latter condition—gummatous arteritis—is to begin with a peri-arteritis—that is to say, an infiltration of the adventitia of the vessel, which interferes with the nutrition of the other coats, with the result that they undergo degenerative changes. This brief description of the anatomy of the syphilitic lesions is sufficient for our purpose to-day, and I will pass at once to the individual forms of the disease as they affect first the brain and secondly the spinal cord.

Cerebral syphilis of any kind is frequently ushered in by prodromal symptoms, the most common of which are headache and insomnia. The headache is often general and ill-defined at first, and later is concentrated in one particular spot which corresponds roughly to the site of the lesion. The insomnia is usually of considerable duration, but is sometimes replaced at or about the time of the onset of definite symptoms by a period of somnolence, at times amounting to stupor.

There are three different kinds of lesions due to cerebral syphilis. The first is vascular, namely, peri-arteritis affecting an artery, of more or less magnitude, which ultimately becomes thrombosed. The symptoms evoked are in no way different from those which we associate with arterial thrombosis due to any other cause, and the exact condition may only be distinguished by general considerations. The latter include such symptoms as headache and somnolence, to which we may add the occasional presence of optic neuritis, which is probably produced by a coincident affection of the basal meninges. The middle cerebral artery is the most frequent site of this vascular disease, and hemiplegia, with or without hemianæsthesia and hemianopia, the most usual clinical manifestation. As a notable example of this condition may be mentioned the case of a man who, at the age of twenty, contracted syphilis, and was treated for a period of seven months. Five months later he developed headache and insomnia, and a few days later, in the course of twenty-four to thirty-six hours, lost the use of the right arm, the right leg, and to a less extent the faculty of speech. He was treated with iodides and mercury energetically, and some improvement rapidly took place, but three weeks later, while still under treatment, he suddenly became drowsy and stupid, and quickly developed a hemiplegia on the left side, became comatose, and died. The autopsy showed typical syphilitic arteritis of both middle cerebral arteries, with thrombotic effects corresponding to the time of their duration. A collateral circulation had been established over a considerable part of the left motor area. The case is characteristic of cerebral vascular syphilis in every respect, except that it did not respond to treatment. These exceptions occasionally occur, and must be regarded as examples

of a particularly virulent infection. Basilar arteritis with thrombosis is probably the second most common vascular lesion, and results in pontine thrombosis usually limited to the distribution of one of the branches which leave the main artery at a right angle and pierce the pons along one side of the median raphé. A simple or crossed hemiplegia is thus produced, although in some cases the lesion is more extensive, and a double hemiplegia with pseudo-bulbar symptoms is evolved. I have seen a hemiplegia of pontine origin associated with tabes dorsalis in the same patient, and I may incidentally draw your attention to the fact that syphilitic and parasymphilitic conditions are by no means uncommonly seen together, both clinically and on the post-mortem table.

Thrombosis due to syphilis may involve any cerebral or cerebellar artery, and I have lately observed a case in which the arteries supplying the dentate nuclei of both cerebellar lobes were affected by this condition; but the middle cerebral and basilar vessels are undoubtedly the most common sites for this morbid process.

The next cerebral syphilitic disease is that to which we give the name gumma or syphiloma—a tumour or growth which, like other neoplasms, may be situated either upon or below the surface of the brain substance or upon one of the cranial nerves. Unlike other growths it is probable that gummata always arise in connection with the meninges, although in the cases where they are deeply situated they may extend some distance from the fold of pia-arachnoid whence they take their origin. They are more commonly superficial than deep, and are not infrequently multiple. On account of their situation they frequently give rise to epileptic convulsions, commonly of the Jacksonian type—a convulsion in which the spasm begins in one particular muscle group, spreads with a definite march, and either does or does not become general. In one such case a man had epileptic seizures, beginning in the hand and unaccompanied by loss of consciousness, for five years before he came under observation. The development of further syphilitic lesions proved fatal, and a superficial gumma in the hand area of the ascending frontal convolution was found at the autopsy.

Gummatous meningitis or gummatous meningo-encephalitis is the third type of cerebral syphilis. Its favourite site is probably that part of the basal meninges which corresponds to the interpeduncular space, where the basilar artery breaks up to take its part in the formation of the circle of Willis, and where the third nerves lie in close contact with the posterior cerebral arteries. As a result of this anatomical arrangement, meningitis in that region is most frequently manifested clinically by a unilateral or bilateral ophthalmoplegia, not uncommonly associated with headache, vomiting, and optic neuritis. This clinical picture as the first evidence of intracranial syphilis is by no means unusual.

Another frequent site for the meningeal gummatous process is the posterior end of the fourth ventricle. This condition is a most serious one, because, in spite of the fact that it may be recog-

nised early and appropriately treated, it nearly always gives rise to hydrocephalus by blocking the exit of the cerebro-spinal fluid. In fact, the fibrous healing which takes place as the acute stage subsides is probably largely instrumental in bringing about the blockage. Those cases which occur in children are easily recognised on account of the progressive enlargement of the skull, but in the adult the clinical picture is often that of an intracranial tumour without localising signs. Such a case came under my observation last year, and led me to advise trephining the right frontal region for the relief of pressure and for the possible presence of a tumour in that situation. No tumour was found, but for some months the patient was free from symptoms. These, however, returned, and in spite of anti-syphilitic treatment the man died. A gummatous meningitis was found in a healed condition at the posterior end of the fourth ventricle. In these cases we cannot expect to get good results from the exhibition of mercury and iodides, and so far surgery is inadequate to deal with the difficulty.

Less commonly the surface of the hemisphere is attacked by a meningitis which eventually leads to involvement of the dura mater as well as the leptomeninges. A thick fibrous mass becomes formed upon the cortical surface, and the latter frequently undergoes secondary necrosis. This condition is known as pachymeningitis, and the symptoms it gives rise to are often rather obscure. Epileptic convulsions are common, and I have seen a victim of this morbid process die in *statu epileptico*. Here again the lesion, once established, is practically beyond remedial treatment.

I now pass to the spinal cord. The prodromal symptoms are usually defined as tingling or numbness in various parts of the limbs or trunk, not infrequently associated with pain of a burning character located over some part of the vertebral column.

Again, the first group of cases may be classed as vascular. Many years ago Dr. Bastian pointed out that spinal thrombosis was a frequent cause of the condition improperly known as transverse myelitis. True, inflammatory myelitis is a comparatively rare disease, and statistics show that 80 per cent. of cases to which the term myelitis has been applied are probably cases of spinal thrombosis, the majority of syphilitic origin. The anatomical process is identical with that seen in cerebral thrombosis, and the resulting necrosis of tissue gives rise to symptoms of paralysis and anaesthesia corresponding to the position of the lesion. Like cerebral thrombosis, too, spinal thrombosis has a favourite site—i.e. in the dorsal region of the cord between the sixth and eleventh dorsal segments. Most frequently, therefore, the clinical picture of such a case is that of a paraplegia which may be either flaccid or spastic. When the lesion amounts to a complete physiological section of the cord, a flaccid paralysis of the lower limbs is produced; when the lesion is incomplete, a spastic paraplegia is the result. Other phenomena in relation to sensation, to the action of the sphincters, and to trophic changes in the muscles, depend upon the extent and site of the disease.

Gummata are found in the substance of the cord and sometimes on the spinal roots. They are not infrequently multiple. When they occur in the substance of the cord they produce the symptoms which we associate with other kinds of intramedullary neoplasm, and they sometimes simulate the picture of a transverse myelitis. Spastic paraplegia in a syphilitic patient may be due either to a gumma or to a focal thrombosis. Fortunately the treatment is on the same lines in either case.

With regard to the spinal meninges, we recognise here too a leptomeningitis and a pachymeningitis, the former being more common on the posterior surface of the dorsal region, the latter—a rare affection—involving, as a rule, the cervical enlargement. The symptoms are often somewhat indefinite, but in the main belong to the following type; atrophic paralysis of muscular groups of similar segmental innervation, and pain, together with impairment of sensation in the area of distribution of the spinal nerves, are most often observed.

In regard to the general diagnosis of these diseases the facts I have already put before you, especially those which I have referred to as characteristic of the cerebral and spinal types, are of great importance, and, together with the necessary inquiry into the antecedents of the patient, the observation of evidence of syphilitic lesions in other systems, and the results of treatment, are usually sufficient for our needs. By means of lumbar puncture an examination of the cerebro-spinal fluid for excess of lymphocytes may in a very few cases be of service, when other signs are wanting, but this procedure can hardly be regarded as a *sine qua non* for the purpose of diagnosis, and is certainly not yet justified as a routine measure in all cases. It is important not to be misled by the tendency to partial recovery or improvement which is evinced by almost all cases of intracranial neoplasm when placed in bed and under the influence of mercury and iodides. This is probably merely the effect of lowered blood-pressure. On the other hand, the presence of the Argyll Robertson pupil in association with lesions which are obviously of a gross character, is a piece of evidence in favour of their syphilitic origin not to be overlooked.

Treatment.—Everyone has his own way of administering mercury. Probably the application of mercury by inunction and the giving of iodide by the mouth is as good as any. The important thing is to push the former to the point of toleration, and to give sufficient doses of iodide for the purpose in view. It is not necessary to give more than thirty or forty grains three times daily in the majority of cases, and this dosage should be reached by gradual additions. Above all it is necessary to remember that a patient who has once manifested a syphilitic process in his nervous system should be as continually under medical care as an epileptic, especially when he is feeling most fit and well. The judicious administration of mercury at regular intervals over many years, preferably for the remainder of life, is strongly indicated in every case of cerebro-spinal syphilis, and I am firmly of the opinion that by this means, and by this means only, can we ward off a recurrence of the disease. As I

have already pointed out, some very exceptional cases are not responsive even to energetic treatment.

It is not often that cases of cerebral syphilis require surgical treatment, but the free opening of the skull for the sake of rapidly ameliorating the

optic neuritis when this has gone very far and permanent loss of sight is threatening, and when anti-syphilitic treatment has been too long delayed, may certainly be considered justifiable in exceptional cases.

THE USE OF COCAINE BY DENTISTS.

By FREDERICK B. PENFOLD, M.R.C.S., L.R.C.P.Lond., L.D.S., R.C.S.Eng.

A CORRESPONDENT writes: "Numerous dentists are quite willing to inject into the gum a mixture containing cocaine, even when they know the patient to be suffering from heart disease, and yet medical men in such cases emphatically refuse to sanction such administration, even for the extraction of a single tooth. If there have been fatalities directly resulting from these injections, the large number of sufferers from heart disease who innocently request the dentist to use the drug should surely be cautioned. At the same time it would be interesting to know if there exists any local anæsthetic safe and efficient."

The inquiry whether "numerous dentists are quite willing to inject into the gum a mixture containing cocaine" can be met with an affirmative answer, and it may be said that this humane form of treatment has been carried on successfully for many years, rendering bearable what is acknowledged to be an excruciatingly painful operation. Cocaine, or its derivative eucaine, in combination with other drugs, is in daily use by dentists for many painful operations, apart from extraction, and untoward results, much less fatalities, are very few and far between. One would have to spend a deal of time to find records of fatalities resulting directly from these injections performed by a qualified dentist on a normal subject.

It is as well to compare the dosage of these "mixtures containing cocaine" with that of the preparations given in the British Pharmacopœia, and it will be seen that the druggists have minimised to the lowest point consistent with efficiency the percentage of cocaine contained in these mixtures. While the British Pharmacopœia allows a dose of 2 to 5 min. of a 10 per cent. solution of cocaine in the official hypodermic preparation—the proprietary preparations are usually 1 per cent., and often less. When eucaine is used the percentage is still lower. So that these mixtures containing cocaine are not so deadly as one would suppose at first sight, and after many years of experience the druggist has obtained an almost non-toxic preparation which contains less than 1 per cent. cocaine.

To minimise general absorption, and to produce a more complete local anæsthesia, many drugs have been resorted to in combination with cocaine or its

derivatives. Of these the most important is suprarenal extract, which is used with the objects above named, and for its hæmostatic properties. The cases where untoward results have attended a cocaine injection are not numerous, and as a rule the symptoms do not last more than a few minutes. It is not uncommon to have the same condition occur after an extraction conducted without the help of a local anæsthetic, in which case the shock is far greater and the operation far more trying to the patient.

There does not seem any indication which will lead one to foretell the cases in which cocaine will act adversely, but such a result occurs more often in the young; and strong, healthy individuals are as often affected as the weakly. Now and again an apparently healthy individual will show some untoward symptoms, such as slight faintness and pallor, with perspiration and giddiness, all of which pass off in a few minutes. Occasionally sickness may follow, and this usually terminates a series of symptoms, which are quite as likely to occur after an extraction without cocaine.

Although occasionally, serious symptoms do arise from small doses of cocaine, they can justly be put down to personal "idiosyncrasy," in the same way that chloroform affects, in some unusual manner, certain individuals. One must not imagine because there is no means of foretelling such an idiosyncrasy that patients should be left to providence to protect them. It is the duty of every professional man to treat each patient as though the subject of an idiosyncrasy, and to proceed with the injection cautiously, little by little, until the whole area is sufficiently anæsthetised. It would be courting the disaster of publicity in a coroner's court for a dentist to administer cocaine if he is aware that the patient's medical adviser has emphatically refused to sanction such administration.

A dentist after his five years' training, which includes a course of dental therapeutics, is quite aware of the action of cocaine as he is of many other substances, poisonous and otherwise, which he has to use, and he is quite prepared with the usual antidotes and restoratives in the case of accident. In using cocaine he must of course take all precautions, and if, for any reason, the advisability of its use in an individual case is a matter of doubt, he should, prior to the administration of the drug, take the opinion of the patient's medical adviser. But for a dental practitioner to discuss with his patient the safety, or otherwise, of cocaine as a local anæsthetic, is neither necessary nor advisable.

THE DIET OF TO-DAY.

By W. D. HALLIBURTON, M.D., F.R.C.P., F.R.S., Professor of Physiology, King's College, London.

(Specially reported for THE HOSPITAL.)

IN discussing the question of the most suitable diet for the healthy, Professor Halliburton, at the Incorporated Institute of Hygiene on Wednesday, January 9, delivered a lecture incorporating certain features of the problem. Diet constituents appear to be of an extremely diverse character, but when examined it is found that the number of substances is after all not very numerous. There are inorganic foods, those derived from the mineral world, and water, oxygen of the air, and the various salts, but principal importance attaches to the derivatives of the organic kingdom, substances which have life, either vegetable or animal. The first of the three main kinds are proteids or albuminous substances, found in eggs, meat, or milk. The second class are carbohydrates, substances of the nature of starch and the various forms of sugar; and the third including substances which are called fats—compounds of glycerine and various fatty acids. These contain carbon, hydrogen, and oxygen in certain proportions, and the proteids contain in addition to these the important element nitrogen, answering for the building up of the protoplasm of the body and are spoken of as nitrogenous foods—the fats and carbohydrates as non-nitrogenous. Professor Voigt, of Munich, formulates the proportion in which these substances occur in the standard diet, putting the proteids required at 100 grammes, equivalent to $\frac{1}{4}$ lb. If all proteids were taken in the form of meat, 1 lb. of meat would be required in the 24 hours. Milk contains 10 per cent., and cheese is pure proteid. Starch and sugar form the main constituents of our diet and furnish about 250 grammes, and the fats about 100. Baron Liebeg grouped the dietary in another way. The proteids or nitrogenous he regarded as flesh-forming. The other forms of food he denominated heat or energy producers. This classification does not recognise the fact that proteids are also a source of energy. Within the last few years Professor Chittenden, of Yale, has devoted much enthusiasm to the investigation of this subject and has made some experiments of first-class importance by placing numbers of persons on a rigid regimen and reducing the 100 grammes of proteid down to 50 grammes. Chittenden is a strong advocate for temperance in the eating of meat and other forms of proteid food, and concludes that the amount of albuminous food indulged in by the greater number of meat-eating nations is a good deal too high. While sympathising with Professor Chittenden for his advocacy of temperance, Dr. Halliburton thought the adoption of his views was fraught with danger.

Professor Halliburton pointed out that while nitrogenous food is essential for the repair of tissue

waste, the terms nitrogenous and nutritious must not be regarded as synonymous. Non-nitrogenous foods are equally necessary for the preservation of good health, as these supply energy and animal heat. Undoubtedly, a large amount of proteid food is not required for tissue repair, which means that its excretion causes waste of energy. It is, therefore, regrettable that most well-to-do persons eat more meat and drink more alcohol than is good for their health. Nevertheless, Professor Halliburton did not think it wise to accept Professor Chittenden's views in full, for the reason that the minimum diet is not necessarily the optimum. In support of this argument the lecturer gave as examples the dietary of the poor in large cities, and the small amount of nitrogenous matter eaten by vegetarians. Both classes, he considered, showed less resisting power to hardship and disease than those who were meat eaters. The beneficial effects of generous feeding in pulmonary tuberculosis, and of the rest cure and good feeding for various nervous diseases were here quoted in support of the lecturer's attitude. He was, he said, of the opinion that the amount of proteid food should not be limited to subserve the repair of waste tissue, for this means to live on the margin of danger; but he thought that experiments on a far wider scale than Professor Chittenden's must be carried out before dogmatic statements would be safe.

Physiologists had called attention to many considerations in connection with Chittenden's work which made one pause before accepting his conclusions. It had been calculated by Dr. Loathes that the amount of nutriment provided to the infant by the mother's milk was about ten times that of Chittenden's minimum, and even allowing for the growth of the infant, what is true of one period of life is probably true in others. It was not considered physiologically necessary to take food which would yield the least amount of refuse either nitrogenous or otherwise. In this connection experiments on animals are not nearly so convincing as experiments made upon man. For if the vegetarian can point to the large amount of work done by animals living upon a very dilute proteid nutriment, the meat eater can point to the lion, in which exactly the opposite is true. The poor feed on a diet which is very like Chittenden's, and their nutritive condition is not such as to induce others, who can afford a more liberal diet, to follow their example. In Oriental countries the meat eaters have come to the forefront and can withstand disease, fatigue, and privation most easily. In reference to the Japanese the lecturer pointed out how sadly needed are accurate details of what this nation exactly does consume. There is no doubt that within recent years their vegetarian habits have been largely departed from, and some writers have, in part, attributed their recent vigour

and success to this very circumstance. Referring to the Japanese, who are always adduced as models of plain living combined with efficiency, Professor Halliburton drew attention to the fact that no accurate information had been forthcoming as to whether the diet of our allies was so very poor in proteids as had been alleged. The supposition that the Japanese subsisted wholly on vegetable products could not be supported. Undoubtedly, in recent years, their vegetarian habits had been largely departed from, so that it was open to ask whether their recent vigour and success may not have had an exactly opposite origin to that so often attributed. In resistance to disease there was nothing like a good appetising diet. The open-air cure for consumption has been spoken of as the over-feeding cure, and in the rest-cure treatment for nervous troubles, there is no doubt that, abundant food materials enabled the body the better to resist the disease. To maintain in efficiency the phagocytes it seemed to be necessary to have a very large excess of nutrient material in the blood which surrounds them. The real explanation of the usefulness of an apparent excess is that certain constituents of the proteid molecule are particularly essential for the building up of the tissues. The amount of these necessary constituents is very limited in the proteid molecule, and in order to obtain an adequate supply the body has to put up with a good deal of waste substance, but the large size of the liver appears to be an express provision of nature for dealing with this waste rapidly. The easy digestibility of the proteids of animal origin render them superior to those from the vegetable world, and the so-called vegetarian has had perforce to recognise this by adding to his diet three of the richest products from the animal kingdom—namely, milk, cheese, and eggs.

Speaking of milk, Professor Halliburton said it had been called a perfect food because it contains all the different kinds of compounds in suitable proportions, and should be used as the exclusive diet of infancy, but it was like the voice of one crying in

the wilderness to preach that doctrine to the public at large. They are proud of the fact that their babies will "eat anything." The milk supply should be pure, and this ought to form one of the front-rank subjects for the attention of the Government. Preservatives often concealed the presence of germs of disease and acted harmfully upon digestion and upon the digestive ferments. In legislation for the provision of an adequate milk supply for infants and invalids the prohibition of preservatives should form a factor.

Diet was the subject of a great many fads. The most dangerous talkers were those with a little knowledge. Thus Mr. Horace Fletcher was the apostle of thorough mastication, but no amount of chewing could put more energy into food than it already had. The law of the conservation of energy was one of the truest in physiology. To suppose that by the act of thorough mastication one could make food more valuable than it was previously was nonsense. The modern tendency is towards moderation in both eating and drinking, though it is improbable that the "tablet" diet is ever likely to be introduced into public favour. There is the æsthetic and psychical element to be considered, and that is particularly true of those with weak digestion, and of invalids. The humanitarian and sentimental argument used by the vegetarians has received powerful support from the recent disclosures. But vegetarianism, if carried too far, may produce greater horrors even than the Chicago stockyards. For well-meaning but ignorant people had already carried vegetarianism to excess and imposed a great deal of unnecessary suffering upon children. It is alleged that a flesh diet is bad for gout. No doubt it is the case that certain extractives in meat are particularly harmful in gout and allied disorders. One cannot prescribe as a proper diet for the healthy one which is necessary for gouty sufferers. Certain forms of disease require certain forms of diet. For instance, one cannot advise vegetarians to abstain from carbohydrate food because that form of diet is bad for diabetics.

REMEDIES AND THEIR USES.

Exodin.

This is a new purgative manufactured by Schering. It is somewhat similar to "purgatin," being an oxyanthraquinone derivative (diacetyl-rufigallic acid tetramethyl ether). It is a yellow, tasteless, inodorous powder insoluble in water and sparingly soluble in alcohol. It is pleasant to take as it has no tendency to upset the stomach; the action is free from any griping, and is as a rule single, producing a soft water evacuation. The effect of the drug sets in as a rule after six to eight hours. The value of exodin is chiefly in cases of habitual chronic constipation in otherwise healthy persons; it is especially useful in the constipation associated with the earlier months of pregnancy. Its efficacy appears to be scarcely impaired by repeated administration. Exodin is supplied in 0.5 gramme

($7\frac{1}{2}$ grain) tablets and the dose is from one to three tablets; they may be broken up if preferred and the powder suspended in water. For children one tablet is enough.

Hypnal,

or antipyrin-chloral hydrate, as prepared also by Meister Lucius and Bruning, is an essentially safe and certain hypnotic in many forms of mental disease; as a sedative in acute mania or early delirium tremens it has produced quiet sleep, and will be found of the greatest service in the treatment of restless cases of chorea. It is soluble in water, and, therefore, is very simple to dispense, or it may be ordered in cachets or powders, gr. 20 for single administration or 10 if repeated. Hypnal is free from depressant after-effects and does not tend to produce symptoms of collapse.

PRACTICAL NOTES ON DIAGNOSIS AND TREATMENT.

Abdominal Conditions in Enteric Fever.

THE absence of abdominal distension and tenderness in enteric fever would seem to indicate the absence of extensive or deep-seated ulceration in the agminated glands. Sir Wm. Gull, in a doubtful case of typhoid, used to place great stress on the distension of the abdomen, as being one of the most trustworthy facts in making a diagnosis.—*Dr. G. H. Whigham.*

Guaiacol in Enteric Fever.

DR. B. M. BAKER recommends guaiacol in cases of enteric fever. He finds that it reduces the temperature and pulse, checks diarrhoea, and gets rid of tympanites. The dose he advises is five minims thrice daily.

Otitis Media and Bathing.

AN occasional cause of acute otitis media is *frequent bathing*, especially the ducking of the head in water and allowing the water to get into the auditory canal, and to rest against the tympanum without thoroughly drying the ears.—*Mr. Henry Morris.*

Olive Oil in Lead Poisoning.

OLIVE OIL in large doses, 5 or 6 ounces, will, it is said, promptly cure lead colic, and the same medicine given in 2-ounce doses in the 24 hours, has a beneficial action in the other symptoms of plumbism.

Tonsillitis.

THE following is recommended as a prophylactic in patients liable to attacks of tonsillitis:—Oil of peppermint 8 drops, carbolic acid 1 drachm, rectified spirit 2 drachms. Ten drops added to a cup of warm water and used as a gargle night and morning.

Bladder Weakness.

IN women who have had children there is a form of bladder irritation which is, perhaps, due to a slight prolapse of the pelvic floor, not enough, however, to be detected on examination. The chief symptom is the constant dribbling of small quantities of urine during the day. The patient is not disturbed while recumbent. Escape of urine is often promoted in such patients by coughing. This kind of bladder trouble is benefited by strychnine and ergot.—*Dr. G. E. Herman.*

Chloride of Ethyl in Neuralgias.

THE local application of chloride of ethyl spray has sometimes not only relieved, but also cured some forms of neuralgia. Hemicrania, lumbago, and supra-orbital neuralgia have all been cured in this way.

Creasote in Phthisis.

FOR the success of creasote in phthisis pulmonalis it is essential (1) that the creasote should be absolutely pure; (2) that it be taken *immediately* after meals. The creasote should be given in gelatine capsules, each containing one minim. Begin with one capsule thrice daily, and gradually increase the dose until the patient is taking 15 minims of pure creasote thrice daily.—*Sir Felix Semon.*

Local Applications in Inoperable Breast Cancer.

ANY lotion or ointment containing morphine is suitable, but I know few more soothing applications to an incurable breast cancer than the old-fashioned conium poultice. This may be made from the fresh leaves, or $\frac{1}{2}$ ounce of the succus conii may be added to an ordinary breast poultice.—*Mr. Marmaduke Shield.*

Garlic in Fœtid Expectoration.

I HAVE found garlic of distinct service in cases of dilated bronchi with fœtid expectoration. I have usually given the garlic in the food. A "clove of garlic" has been chopped up and boiled with the beef-tea, and only very few patients have been unable to take it in this way.—*Dr. Vivian Poore.*

Renal Colic.

RENAL COLIC does not only occur as the result of the passage of a renal stone along the ureter, but other substances, such as blood-clots, mucus clumps, tubercular sloughs, hydatid cysts, and detached pieces of renal growth are able to evoke the same colicky pain and distress, though perhaps in a less degree.—*Mr. Hurry Fenwick.*

Epilepsy.

IN cases of epilepsy, where the bromides fail, the following is sometimes successful: Zinc oxide, $\frac{1}{2}$ grain; extract of belladonna, $\frac{1}{2}$ grain; powdered valerian root, 15 grains. Take this in the form of a powder three times daily. The dose of the zinc oxide may be gradually increased until it reaches 5 grains thrice daily.

Hypodermic Injection of Mercury.

IN cases of syphilis of the nervous system, in order to get the patient promptly under mercury the medicine should be given hypodermically. Inject once a day deep into the muscles of the gluteal region one-eighth of a grain of perchloride of mercury dissolved in five minims of water. If the syringe is clean there is no need to fear any bad result.—*Dr. Hale White.*

Local Application in Acute Rheumatism.

PROFESSOR BOURGET concludes that salicylic acid is rapidly absorbed through the skin, and that the absorption is increased when the drug is mixed with a fatty basis. He therefore applies the following ointment to the affected joints in cases of acute rheumatism. Salicylic acid, 1 part; lanoline, 1 part; oil of turpentine, 1 part; prepared lard, 10 parts. To be smeared on without rubbing, and the joint to be then covered with flannel.

Trional.

ACCORDING to Dr. Bryer, men need much larger doses of trional than women. In a man the commencing trial dose should be 17 to 25 grains, whilst with a woman 12 to 15 is sufficient.

Osteotomy in Rachitic Deformity.

I DO not think that osteotomy ought ever to be done under the age of six years, for a very large proportion of rachitic deformities disappear as the child gets older.—*Mr. H. H. Cluton.*

THE BOOK WORLD OF MEDICINE AND SCIENCE.

TUBERCULOSIS; ITS ORIGIN AND EXTINCTION. By W. PICKETT TURNER, M.D. (London: Adam and Charles Black. 1906. Small 8vo. Pp. 96. Price not stated.)

DR. TURNER reminds us that in England there are always 300,000 people afflicted with consumption, and that the deaths from this disease amount to 60,000 annually; and he argues, perhaps a little illogically, that "Nature could never have intended such an amount of suffering to occur." Nevertheless a disease which claims such a terrible death-roll must ever possess the greatest interest to us all; and medical men are bound to study whatever is presented to them as purporting to throw fresh light on the subject, provided the message comes in reasonable guise. At the onset we may say that Dr. Turner does not believe in any of the serum cures, and although we think he is a little too sweeping in his condemnation of these, more especially as he accepts the doctrine of phagocytosis on which these serum cures are based, he is unquestionably right in protesting against the publicity given by the lay Press to "cures" of which the potency has not yet been demonstrated. Neither do we think the author is right in his estimate of the open-air treatment, although it is quite possible that more was at one time claimed for it than experience has been able to confirm. This is by the way; and we come to Dr. Turner's own thesis. He forms a special group of diseases which he names the "Mycotic" group. These diseases are caused by herbivora eating certain grasses, which have been attacked by some kinds of bacteria. The animals eating these grasses not only suffer themselves but they communicate the disease to others. Tuberculosis is one of these diseases. It is caused by cattle eating grasses on which the tubercle bacillus is present. These cattle are, in Dr. Turner's words, "the intermediate indispensable host"; and man drives the disease from the flesh or milk of such animals. The theory is thus beautifully simple, and the statistics quoted by the author tell us that of 22,918 cattle slaughtered over a year old, 7,619, or 33.21 per cent., were tuberculous. Sheep were very little affected, and goats not at all, while pigs suffered only to the extent of 2.73 per cent. Now it is quite certain that sheep and goats as a rule do not consume the same kind of grass as cattle, and that they spend more time in the open air than cows. In the Island of Jersey, cattle are almost entirely free from tuberculosis, and this tells in favour of Dr. Turner's hypothesis. Another point is that if Dr. Turner is right, English vegetarians ought to suffer less from phthisis than English beef-eaters. Possibly the number of vegetarians may be too small to generalise from; but we venture to suggest the investigation of this point to Dr. Josiah Oldfield. We regret that we have not space to refer to Dr. Turner's suggestions for the prevention of tubercle in animals, as well as many other interesting points, and we give the author's own recapitulation: "Tuberculosis is an animal disease and is primarily derived from cattle. It belongs to the mycotic group of diseases, bovines obtaining it from grasses by natural affinity. Man acquires the disease by ingestion or inoculation, never by inhalation. It is not hereditary, neither is there any predisposition to it in the individual. The bacillus in a state of nature is a saprophyte, but becomes pathogenic in cattle when deprived of actinism."

HUMAN PHYSIOLOGY (First Stage) (Organised Science Series). G. NORMAN MEACHEN, M.D., M.R.C.P. (University Tutorial Press. 2s.)

THIS book is said to have been written to meet the requirements of candidates of the Board of Education, and is intended merely as an introduction to the subject of physio-

logy. In the preface the author says that a modern writer has said that "books on science are often sadly dull," and that an attempt has been made to relieve this book from such a stigma. The style of the author is certainly easy and simple, and, with the aid of the illustrations, anyone desiring to gain an elementary knowledge of physiology should have no excuse for saying that this book does not supply his needs. To combine what we call interest, however, with the necessary number of detailed facts required for examination purposes is not always easy; yet the study of physiology is one that most people will approach with a certain degree of interest, because we are nearly all of us anxious to know something about ourselves. In addition to reading, students are recommended to dissect a rabbit under the supervision of a teacher, and to perform some simple experiments, such as that of the changing of starch into sugar by saliva, and the digestion of proteids by Benger's *liquor pepticus*. Examination questions are given at the end of each chapter, and by means of these the student may test his knowledge.

WELLCOME'S PHOTOGRAPHIC EXPOSURE RECORD AND DIARY. (London: Burroughs Wellcome and Company.)

THIS diary is one more evidence of the business acumen and up-to-dateness of the methods pursued by this firm. It contains much useful information of value to those photographers who have the camera in habitual use in institutions or for their own purposes. The information is full and interesting, and the mechanical calculator and light tables display much ingenuity and render the estimation of the correct exposure for any subject an easy matter. Two diaries are issued, one for the Northern Hemisphere and the other for the tropics and Southern Hemisphere. The diary includes a folding card for hanging up, which conveys much useful information of development by the factorial method.

"Who's Who," 1907. (London: A. and C. Black.)

THIS book continues to grow in size and utility. The information it contains is well up to date, and much of it has an abiding interest for those who have a sense of humour. What can surpass George Bernard Shaw's recreation, "Anything except sport," or his definition of exercise as "Public speaking"? The book is now indispensable as the most useful address directory for office use.

"Who's Who Year-Book," 1907. (London: A. and C. Black.)

THIS contains the tables which formed the original nucleus of "Who's Who." Its object is to show all the information it contains at a glance, and for busy people of observation it fulfils a distinctly useful purpose.

BOOKS RECEIVED.

T. B. BROWNE, LTD.

"The Advertiser's A.B.C.," 1907. A most useful book of reference for advertisers and journalists.

THE HEALTH RESORTS BUREAU.

"French Law and Customs for the Anglo-Saxon." By A. S. Browne.

JOHN MURRAY.

"Licensing and Temperance in Sweden, Norway, and Denmark."

KEGAN PAUL, TRENCH AND CO.

"The Mind and the Brain." By Alfred Binet.

J. WILLING, JUN., LTD.

"Willing's Press Guide," 1907.

THE CAXTON PUBLISHING CO.

"The Nurling." By Pierre Budin. Translated by W. J. Maloney, M.B.

METHUEN AND CO.

"The Control of a Scourge." By C. P. Child, B.A.

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

CURRENT HOSPITAL TOPICS.

Salford Royal Hospital.

At the December meeting of the Board of Management of this hospital the resignation of the chairmanship, through ill health, was received from Mr. A. Langley Dickins. Mr. Dickins was appointed a member of the Board during the time he was Mayor of Salford, in 1889, and became Chairman in 1898. A resolution was unanimously adopted recording the gratitude of the Governors for the active part Mr. Dickins has taken in the administration of the hospital for so many years, and especially for the valuable services he has rendered as its Chairman.

Charing Cross Hospital.

THE vacant secretaryship of Charing Cross Hospital has at length been filled by the appointment of Mr. Walter Alvey, who has been in the service of the Hospital for the past ten years, first as clerk, and then as assistant secretary and steward. Mr. Alvey has been carrying on the secretarial work of the hospital since Mr. Reade's retirement on pension in June last, and has exhibited marked ability, energy, and enterprise. The appointment is a most popular one among Mr. Alvey's co-workers in the hospital world, where he is well known and deservedly respected.

The Gratitude of Hospital Patients.

SPEAKING at the recent festival dinner of the Royal Southern Hospital, Liverpool, the President, Mr. W. Adamson, stated that it was almost a lifetime since he joined the committee, in 1864, and so first took an active part in the management of the hospital. Mr. Adamson gave some interesting particulars of the appreciation by patients of the efforts made on their behalf. In one case a patient wrote: "I make this offer of myself voluntarily, and perfectly free from compulsion, being a healthy and well developed man, free from any hereditary mental or physical taint, aged 22, as a subject for any surgical operation, major or minor, or medical treatment." Mr. Adamson also stated that recently the Medical Board granted permission to the patients to smoke between the hours of seven and eight in the morning, as well as in the evening. After the new regulations came into force, one of the committee, when going his rounds, was received by the patients with three cheers, followed by, "For he's a jolly good fellow."

Example Better than Precept.

THE example of the late George Herring, and the form his munificence took in regard to the Hospital Sunday Fund, have stimulated the citizens of Liverpool to follow his methods. The first Hospital Sunday collections in Liverpool in 1871 realised £4,740, and last year the Sunday and Saturday collections had increased to £15,000. A general wish is now expressed in Liverpool that this amount should be doubled without delay. Having this in view, the Lord Mayor announces that ten citizens, prominent in philanthropic efforts, have come forward with the generous offer to each guarantee 10 per cent. on the amount collected this year, over and above the £15,000 contributed last year. If, therefore, the citizens of Liverpool bestir themselves, there should be little difficulty in increasing the collections, at once, from £15,000 to £22,500, when the guarantors would make up the total collection for 1907 to £30,000. We hope this result may be achieved, and we rejoice to know that the spirit of Mr. Herring's munificence and example is extending to the provinces.

Bradford Royal Infirmary.

THE vacancy caused in the office of secretary to this institution by the appointment of Mr. Edmund Forster to the Derby Infirmary, has been filled by the election of Mr. John J. Barron, assistant secretary of the Victoria Infirmary, Glasgow. The Committee of Selection carefully sifted seventy applications, first rejecting those candidates who had had no previous experience of hospital work, and then reducing the remainder to seven, and ultimately to three, from whom Mr. Barron was elected by the governors. Mr. Barron was born in Scotland of English parentage, is thirty-three years of age, and has been thoroughly trained in all the duties of the secretarial department of a general hospital. Mr. Barron has worked for fourteen years as assistant-secretary at the Victoria Infirmary, Glasgow, where his services have been much appreciated, and his testimonials include excellent testimony from the Board of Management and the principal members of the medical staff. Mr. Barron is to commence work in Bradford next month, and we wish him a long and prosperous career in his new post.

The Royal Infirmary, Edinburgh.

THE report of the managers of this institution for the year ending September 30, 1906, is full of interest. It illustrates the developments which modern science has imposed upon the authorities of one of the oldest and most efficient hospitals in the country, and gives some insight into the growth and expenditure now entailed upon an institution of this kind. A new surgical out-patient and accident department has been established. This consists of four pairs of dressing-rooms, each containing a separate room for men and for women; one is for fracture cases, one for aseptic cases, one for septic cases, and one for the use of women students. There is a waiting-hall facing the new entrance, which is connected by a corridor with an operating and lecture theatre, with accommodation for about 100 students. Near by are three casualty wards, with four beds each, for the observation of serious cases. The new department contains accommodation for the resident house surgeon, the sister in charge, and a workroom for the assistant surgeon, who is responsible for the working of the whole department. The assistant-surgeons take charge of the department in rotation, for four months at a time. This new department, with a staff of three resident surgeons and seven nurses, has entailed a net expenditure of about £700 a year. The new medical electrical department, and the new bath department, fitted with the latest improvements and appliances, have added to the expenditure. An increase to the nursing and serving staff has cost £300, in addition to a large outlay owing to the substitution of paid for unpaid nurses under the longer period of train-

ing; massage treatment, lately introduced, has cost £200, and the telephonic staff £130. Further additions to expenditure have been due to the re-organisation and extension of the pathological, fire, and works departments, and to numerous minor improvements and additions, together involving an increased expenditure of over £5,000 per annum, or more than £6 per occupied bed. Economies have, however, been introduced to such an extent that, this increase of £6 per occupied bed has been reduced, to a net increase of 7s. 11½d. per bed for the year, as compared with the expenditure in 1899. These results reflect great credit upon the managers and their officers, credit which is increased by the knowledge that although the expenditure in 1906 (£52,116) was £2,000 more than in the previous year, the total revenue, including legacies and donations, has exceeded the total expenditure in 1906 by £3,000. A study of the accounts for previous years shows, that, the authorities in Edinburgh are careful financiers, who decline to incur expenditure before they can see their way to secure the funds to meet it. They have recently decided to appoint a new officer as organising secretary, whose whole time will be devoted to the stimulation of interest in the Royal Infirmary, and to the organisation of collections on its behalf in Edinburgh and throughout the country, particularly from those classes who benefit directly from the institution. The wise economy and sound financial system, in force at this institution, have been maintained without any diminution in the progressive development of its buildings or its work. We commend this fact to the consideration of all hospital managers everywhere.

MIDDLESEX HOSPITAL.

THE LATE MR. E. A. FARDON.

THE death occurred on Wednesday, January 2nd, at St. Lawrence, Ventnor, Isle of Wight, of Mr. E. A. Fardon, who for nearly 30 years had held the appointment of resident medical officer at the Middlesex Hospital. Mr. Fardon came of a Quaker stock, his mother being a Bell of Alton, a descendant of one of the original Quakers, who up to the time of her death, in 1895, at the age of 84 years, regularly wore the Quaker bonnet and grey dress peculiar to that society. She was related by marriage to Elizabeth Fry and the Guernseys of Earlham. One of a family of six, Edward Ashby Fardon was born in 1846, and after receiving his education at the Quaker School at Sidcot, in Somersetshire, entered the salt works owned by his father, Joseph Ashby Fardon, at Droitwich, remaining there until he was 27 years of age, during which time he acquired business habits and knowledge which were of great value to him in after-life. Finding business life uncongenial, he decided to enter the medical pro-

fession, and defrayed the cost of his medical training by means of his accumulated savings, subsidised by money earned in the form of scholarships and prizes.

It was thus he came to enter the Middlesex Hospital as a student in 1873, and he qualified M.R.C.S. in 1878, taking the diploma of L.R.C.P. in 1879. He filled the offices of house physician, junior and senior house surgeon, and then of resident obstetric assistant, during his tenure of which the post of resident medical officer became vacant, for which he applied, and which he was selected to fill. Here he found his life-work, and although he had many tempting offers to engage in private practice, for which he was eminently fitted, he refused to avail himself of these, preferring to devote himself with singular whole-heartedness to the interests of the Middlesex Hospital.

Throughout his long term of office he enjoyed the complete confidence of the Board of Management, the staff, resident staff, officials, and nurses, to all of whom he was very willing to render sympathetic

assistance. To a great extent at his initiative, and always guided by his counsel and careful supervision, many alterations and reforms were effected in the hospital, the nursing department, and in the school. Amongst these mention may be made of the Resident College for Students, the Trained Nurses' Institute, the Convalescent Home at Clacton-on-Sea, the laundry at Hendon, the removal of the kitchens from the basement to the upper floor of the hospital, additional wards, the operating theatres and sterilising apparatus, the new cancer wing and cancer research laboratories. It may with truth be said that in every department of the hospital there are distinct and lasting evidences of Mr. Fardon's administrative energy and ability. For several years he acted as honorary secretary to the Royal British Nurses' Association, and was of great service in guiding the affairs of that body during a troubled period of its history.

It was close upon two years ago that it was discovered that Mr. Fardon had glycosuria, and in spite of careful dieting and treatment, signs of ageing and of lessened vigour became increasingly apparent. In the summer of last year he contracted a "cold," which proved to be a tuberculous infection of the lungs, and in spite of all that the best advice could suggest and careful attention provide the disease rapidly progressed.

He was laid to rest in the well-known churchyard of the old church of St. Lawrence on Saturday, January 5th, and at the same time a memorial service was held in the chapel of the Middlesex Hospital, which was filled by a large and sorrowing congregation, noticeable amongst whom were his Excellency the Greek Minister, Lord Cheylesmore, and Lord Sandhurst, many members of the weekly Board of Governors of the hospital, the staff, and a large number of past and present students and nurses.

RURAL WATER SUPPLIES.

ON November 23 the members of the Rural Housing and Sanitation Association met in the Caxton Hall, Westminster, to listen to and discuss an address by Dr. John Thresh, Lecturer on Public Health at the London Hospital, on rural water supplies. The chair was taken by the Earl of Dundonald, who deplored the increasing depopulation of the country districts, and even suggested that outside pressure might be employed to correct the growing disproportion between town and country population.

Dr. Thresh founded his remarks on the results of the Public Health Acts of 1875 and 1878, which empowered the sanitary authorities to provide water supplies for their districts. In urban areas this power has been successfully used, but the same cannot be said for country districts. The question is largely one of expense. The first essential is that the authorities should have an accurate knowledge of the condition of the existing water-supply, and though they have the power to expend money in investigating this, they very rarely do so. Where it cannot be absolutely shown that cases of disease are due to some fault or deficiency in the water-supply, it is assumed that all is satisfactory. There is, indeed, a popular notion that water from shallow wells is polluted, and may cause typhoid fever, and this keeps many people from living in the country. But in Dr. Thresh's opinion there is no need for this fear, if only the wells are properly constructed, but unfortunately this is not by any means universal. Moreover, even if typhoid does not result from pollution of the water-supply, it does not follow that no injury to health is to be feared, and in places where dairy farming is carried on, or where it is desired to establish factories, or in any other way find work for the people, a good water supply is essential.

At present the owner of a house is not compelled to provide a water supply for it if the cost of doing so exceeds £8 13s. 4d., though with the consent of the Local Government Board he may expend as much as £13. Clearly this limitation makes it difficult for the authorities to bring sufficient pressure to bear on property owners to compel them to provide the requisite water supply. Nor have the authorities the power to make an owner or owners provide a single common source of supply for a group of houses which are reasonably near each other, and apportion the cost among them, unless the water can be laid to each house, which would often mean a very serious expense. Even if

existing houses were left unprovided with a convenient supply of good water, it might be supposed that when new ones are built this important matter would be seen to. In intention it is. There is a penalty of £10 demanded for occupying a new house without obtaining a certificate that it is supplied with water, but as this is not a recurring penalty, many builders find it cheaper to pay it once for all than to provide the water. When this penalty has once been paid the only steps which the authorities can take are those allowed for dealing with occupied houses, i.e. the £8 to £13 limit.

It is true that the Local Government Board can compel the rural sanitary authorities to provide a water supply, but it must first be shown that the existing conditions threaten a danger to the health of the inhabitants, and that a proper supply can be got at at a "reasonable cost"—a very vague definition. Moreover the rural authorities have good reason to fear going to the Local Government Board for permission to improve their water supply. That body does not always seem to realise that the perfection of works which is needed in a town is by no means always necessary in a country district. Thus in town it may be necessary to provide all machinery in duplicate, for the consequences of an interruption of the water supply, affecting a large number of people might be very serious. But in a sparsely populated district they would not be equally serious, and it is better to have a scheme which might on a rare occasion be unsatisfactory than to have no scheme at all. Moreover, the rural authorities have learned to distrust the Local Government Board. Dr. Thresh says: "The opinion is universal, though I do not assert that it is now well-founded, that the more expensive a scheme the more likely it is to receive the sanction of the Board, and that however expensive it is, the Board will require additions and alterations which will greatly add to that expense."

Dr. Thresh thinks it would be wiser for authorities to consider comprehensive schemes for supplying a number of parishes rather than a series of small local supplies. The former course would be more economical, and would be more easily supervised. This would imply power being vested in some authority of wider scope than the parish council, of whom, from the point of view of a sanitarian, Dr. Thresh does not think highly. Parish councillors, often themselves owners of property, are not keen to take

up the ungracious task of forcing property owners to provide a water supply, and it is unfortunate that County Councils have no power to take action unless such action is demanded by a resolution of the parish council. If the County Council had the power to take the initiative even in pressing the parish authorities to protect wells, streams, and springs from pollution, and keep the parish pumps in proper repair, it would be a good thing.

Another point was raised by Mr. A. H. Matthews, Secretary of the Central Chamber of Agriculture, who touched on the unsatisfactory position of medical officers of health who, appointed by the local authorities, have not the power they need to insist on improvements in their districts. Mr. Matthews' suggestion that the public health service should form a branch of the Civil Service would give all sanitary officers, from the M.O.H. downwards, far more independence.

Miss Constance Cochrane, who is so well known in connection with rural housing and its defects, pointed out

another difficulty. In London, and also in Scotland, "any individual" has the power to complain of bad conditions which have not received proper attention at the hands of owners and sanitary authorities, while in the English counties the complaint must come either from the sufferer or from "two inhabitant householders." The aggrieved person knows that if he makes a complaint the chances are that he will be told to quit, and he may not find it easy to get another house, and the "inhabitant householders" are not likely to set the law in operation against fellow-owners of property. Among other things Miss Cochrane spoke of the importance of providing large gardens—not less than a quarter of an acre—for every cottage, so that where there are no drains refuse of all kinds can be disposed of without injury to health. The meeting proved how many difficulties stand in the way of the satisfactory housing of the poor in country districts, but also showed that the Association had a practical knowledge of them and practical suggestions to offer as to their removal.

ISOLATION HOSPITALS IN GUERNSEY.

It is not often that nurses find themselves in occupation of a Government fort, but such is the case in Guernsey at the present time, where Mont Crevelt Battery is now in use as a temporary isolation hospital. This fort, situated on an eminence overlooking St. Sampson's Harbour, formerly mounted three big guns. It was built in the reign of George IV., and is surrounded by a moat (now dry), and has a drawbridge connecting it with the hill, but the raising gear has been dismantled.

The outside walls are high and of enormous thickness, and the gun embrasures have been filled in to ensure proper isolation. At one end of the fort is an old martello tower, which serves now as a sea-water reservoir for watering the roads. On one side of it are the kitchen and larder, on the other the nurses' sitting-room.

The bedrooms for the staff are in the main building, the big room of which, formerly the soldiers' quarters, provides ample and comfortable accommodation for twelve patients. Between this building and the wall of the fort, looking seaward, a level grass plot makes a fine playground.

A laundry is provided, but is not now in use. The old magazine, with its original doors, one of massive copper and the inner one of open woodwork, is the sanctum of the porter, a hearty and genial old salt who is well satisfied with his quarters and somewhat unusual work.

The thickness of the walls of the buildings makes them very dry, and the whole place has been well kept up by the authorities, so as to be ready for immediate occupation when required. The King Edward Sanatorium, the main infectious hospital of the island, is most beautifully situated 200 feet above the sea-level, and enjoys a fine view of the distant French coast, the Casquets, and the other islands of the Norman archipelago.

It is a fine modern group of buildings, opened in 1902, and built upon the block system. The wards are very lofty and airy, and have large verandahs round them; the walls are finished with Parian cement, and have rounded corners. Electric light, bells, and radiators for use when required are provided; there is a small telephonic exchange for use between the wards and the administration block, and through it a patient can communicate from any bed

in the hospital with any subscriber or call-office in the island.

The patients can also listen to the services in St. Peter Port Church, three miles away, and special receivers are provided for the purpose, so that sounds in the wards are not heard by and do not disturb other listeners.

Such facilities are somewhat unusual, but in Guernsey both the sanatorium and the telephone system belong to the States, or Government of the Island.

The administrative block is large, well furnished, and comfortable, and in addition to the ordinary accommodation two big rooms are provided where the friends of a patient "dangerously ill" may pass the night, if their home is distant from the sanatorium. The laundry is well equipped with machinery, and worked by a six-horse power motor: it is provided with a pressure boiler to heat the water required by means of high pressure steam. The disinfecting plant is of the latest Manlove Alliott vacuum type, and a small refuse-destructor is kept always going. A mortuary and "viewing room," with a glass screen between, is near the disinfecting block. The water-tower contains tanks for filtered soft, as well as drinking, water, and both supplies are laid on throughout the buildings; the tanks are filled by a double-action pump driven by an electric motor. The drainage is dealt with by a system of septic tanks. The grounds are well laid out with trees and flowers, and a croquet lawn has been levelled and turfed at the expense of a kindly and grateful patient. In this favoured and sunny climate patients may often be seen enjoying the fresh air in their beds on the verandahs, while the inhabitants of the "adjacent islands of Great Britain and Ireland" are shivering with cold, or experiencing other climatic discomforts.

The accommodation of the hospital is ample for about 40 patients. The existence of this hospital is largely due to the efforts of the late Jurat Ozanne, C.S.I., a distinguished member of the Royal Court of the island, whose name will be always held in affectionate regard and respect by all connected with it, and the States of Guernsey may well be proud of the fact that they have built, equipped, and maintained an isolation hospital which is equal to any similar institution of its size in any part of the world.

One may also mention to their credit that, if not the first, they were one of the very first public authorities to supply antitoxin free for the treatment of patients suffering from diphtheria.

METROPOLITAN HOSPITAL SUNDAY FUND.

A MEETING of the Council of the Metropolitan Hospital Sunday Fund was held at the Mansion House on Thursday, January 10, the Lord Mayor (Sir William Treloar) presiding, for the election of committees and honorary officers for the ensuing year.

The Secretary (Sir Edmund Hay Currie) said he had received a letter from Canon Pycke resigning his position on the Council, on the ground of inability to attend meetings because of advancing age. It is usual to fill clerical vacancies by members of the same denomination, and as a Roman Catholic had resigned he submitted the name of the Rev. Monsignor Howlett, Administrator of the Cathedral at Westminster, who was recommended by Archbishop Bourne. This suggestion was adopted, and the Secretary was directed to write to the Bishop of Southwark to nominate a South London clergyman to take the place of the Rev. R. S. Hassard, resigned.

To fill lay vacancies on the Council the following gentlemen were adopted, subject to their consent: Dr. James Andrews, of Hampstead, Mr. Frank Debenham, Mr. C. E. Layton, Mr. Alexander Millar, and Mr. A. G. Phillips.

The Distribution Committee was re-elected, with Mr. Frank Bevan, Sir Joseph Dimsdale, and Sir Frederick Treves in place of Sir Sydney Waterlow and Mr. George Herring, deceased, and Sir Felix Schuster, who had resigned owing to his appointment to the India Council.

The General Purposes Committee was also re-elected, with the addition of Lord Cheylesmore.

The Secretary then brought forward a suggestion for the appointment of a Finance Committee. The Fund, he said, had never had such a Committee, but now they had large matters to deal with, such, for instance, as Mr. Herring's estate, it was thought desirable to appoint one. He thought five would be a suitable number. This was agreed to without discussion, and the following gentlemen were appointed: Alderman Sir John Bell, Mr. J. H. Buxton, Sir William Church, Mr. John Hampton Hale, and Sir Ernest Tritton.

The hon. secretaries, Sir Richard Martin and Mr. John S. Gilliat, and the hon. auditors, Messrs. W. H. Pannell and Company, were also re-elected, and the proceedings then terminated.

SOCIAL AND POOR LAW PROBLEMS.

A WISE INEBRIATE.

A MONTH or two ago Richard Harris died in the workhouse of the Haslingden Union, after a residence there of about twelve years. At one time Harris was assistant postmaster and telegraphist at the Bacup Post Office, where his brother was postmaster. The brothers also owned the leading printing and stationery business in the town. Unfortunately Harris contracted bad habits, and became so reduced that he had to be removed to the workhouse. So far the tale is a sad but common one. The sequel, however, is better than that of most similar stories. In the workhouse it was soon found out that Harris was as capable as well as an educated man, and he was given the clerical work of the establishment to do. His ability was so great that the district auditor declared that nowhere else in his district were the books so well kept as they were by Harris at Haslingden. His friends more than once urged him to leave the workhouse and take a situation outside; but he invariably refused, on the ground that in the outer world he would be subject to the same temptations as formerly, and might return to his old habits. Only a month before his

death the Guardians themselves offered to appoint him one of their officers; but this offer also he refused, because if he had accepted it he would have been compelled to live outside the workhouse, and again he feared temptation. Thus he remained to the end of his days nominally a pauper, though it is reckoned that his services saved the Guardians a salary of £3 a week. Doubtless he was wise in his choice, and he is to be respected for the discretion that made him remain in a safe though humble shelter. One would like to know, however, if the Guardians showed any special consideration for this ward of theirs who was to all intents and purposes a valuable servant. In similar cases, where the pauper earns more than his board, lodging, and clothing, it might be well to give special privileges, such as that of having meals apart from the mass of the inmates—who are for the most part the reverse of refined—or of sleeping elsewhere than in the ordinary dormitory. This would encourage a man who was more weak than wicked, and knew his own feebleness, to stay where he was protected against himself, and where the severe treatment which is necessary, with many paupers would drive him out into the world again to his own destruction.

THE EPILEPTIC COLONY AT CHALFONT.

IT is only in comparatively recent times that anything practical has been done for epileptics. These unfortunate creatures were classed with the insane, although between their attacks they were perfectly reasonable. But liable as they are to be at any time disabled by a fit, they cannot follow regular occupations under ordinary conditions, nor is every occupation suited for them. Outdoor work is the best for them, and to provide them with this the Chalfont Colony for Epileptics was founded in 1894. At first only eighteen invalids were received, but the work has grown, as its value has been realised, and the colony is now a little industrial village with a population of 200 patients. So far the place has been managed without running into debt, but there is now a need for more land to give occupation to the invalids, and when it happened that a farm of 150 acres in the neighbourhood of the colony was for sale at the price of £5,500, which is less than land in the neighbourhood usually costs, the Committee of the National Society for Employment of Epileptics, which first founded the colony, and of which H.R.H. the Prince of Wales is President, thought it wise to purchase the farm, even though the purchase involved the borrowing of all but £500 of the money. Moreover, the demand for admittance to the colony is greater than can be met. At present female candidates for admittance have to wait for more than two years before they have a chance of acceptance, and males not much less. To meet the requirements of these sufferers it is desirable that two new homes should be built, one for men and one for women, each to take 24 inmates. This would provide for adults, but there are also epileptic children to be considered, in whose case the open-air life, suitable feeding, and well-planned work that characterise the colony, would be invaluable in bringing them up to be as useful as their condition allows, and in the more hopeful cases bringing them approximately near normal health. But for these there is at present no provision. The Society then wants £4,500 to pay off the debt on the newly purchased land, £7,000 to build two new homes for adults, and £3,000 to build two homes and the necessary school accommodation for children. This may seem a large demand, but great also is the good that will be done by the money. The royal President of the Society has expressed his approval of the appeal which is now being made, and which is signed by, among others, the Dukes of

Devonshire and Northumberland, Adeline Duchess of Bedford, the Bishop of Oxford, Lord and Lady Rothschild, and Mr. Passmore Edwards. Subscriptions may be sent either to the Hon. Treasurer, H. N. Hamilton Hoare, Esq., or to the Secretary, G. Penn Gaskell, Esq., at the offices of the Society, Denison House, Vauxhall Bridge Road, Westminster, S.W.

EDITOR'S LETTER-BOX.

Our Correspondents are reminded that prolixity is a great bar to publication, and that brevity of style and conciseness of statement greatly facilitate early insertion.]

INFLUENZA AND LOCAL IMMUNITY.

To the Editor of THE HOSPITAL.

SIR,—Referring to my article on "Influenza and Local Immunity" in THE HOSPITAL for December 22 last, will you permit me to state publicly that I do not hold any such appointment as resident physician to the Smedley Memorial Hospital, Bath? The addition of this erroneous title to my signature may have been due to the fact that I was at one time consulting physician to the Smedley Memorial Hospital, Matlock. Yours, etc.,

CHARLES J. WHITEY, M.D. Camb.

Bloomfield Avenue, Bath.

THE THERAPEUTICAL SOCIETY'S MEETINGS.—Tuesday, January 22, 1907 :—Therapeutical Society, in the Apothecaries' Hall, Blackfriars, E.C., at 4.30 P.M., the following papers will be read : Dr. R. B. Wild, "The Proper Scope of the Teaching of Materia Medica, Pharmacology, and Therapeutics in the Medical Curriculum"; Dr. Bonnefin, "On a New Method of Rendering Creosote, and Cannabis Indica, Soluble"; and "Short Notes on Certain Useful but Little-known Drugs."

NOTICE TO CORRESPONDENTS.

All MSS., Letters, Books for Review, and other matters intended for the Editor should be addressed THE EDITOR, "THE HOSPITAL," THE HOSPITAL BUILDINGS, 28 & 29 SOUTHAMPTON STREET, STRAND, W.C. The Editor cannot undertake to return rejected MSS., even when accompanied by stamped directed envelope.

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Medical and Administrative Appointments.

THE ROYAL NATIONAL HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, VENTNOR, ISLE OF WIGHT.

Two ASSISTANT RESIDENT MEDICAL OFFICERS REQUIRED. Salary £80, with Board and Lodging in the Hospital.

Every Candidate must be doubly qualified, registered, and unmarried. He must have knowledge of Bacteriological methods.

Applications in candidate's own handwriting, stating his age and qualifications (with one copy of three recent testimonials), may be sent at once to the SECRETARY, 34 Craven Street, Charing Cross, London. (432)

THE URBAN DISTRICT COUNCIL OF ABERDARE.

APPOINTMENT OF MEDICAL OFFICER OF HEALTH.

The Council of the above district invite applications for the above appointment from duly qualified medical gentlemen holding the Diploma of Public Health.

Age not exceeding 40.

Welsh desirable.

Canvassing, directly or otherwise, will be an absolute disqualification, but candidates are at liberty to forward copies of their applications and testimonials to members of the Council.

The area of the district is 15,127 acres, and the estimated population about 48,000.

The gentleman appointed will be debarred from Private Practice, and required to devote his whole time to the duties of his office.

Undertake the duties, charge, and control of the Infectious Disease and Isolation Hospital.

Perform the duties of Medical Officer of the Local Education Authority, and generally perform such other duties as the Council and Education Authority shall from time to time require.

The salary will be £500 per annum, which will be allocated as follows, viz. :—

| | |
|---|------|
| As Medical Officer of Health | £400 |
| As Medical Assistant and Superintendent of Hospital ... | 40 |
| As Medical Officer to the Education Authority | 60 |

£500

The appointment will be made on the 11th day of FEBRUARY, 1907, and duties will commence on the 1st day of APRIL, 1907.

The appointment in the first instance will be for a period of TWO YEARS, and will be subject to the approval of the Local Government Board.

Further particulars as to the duties, qualifications, and conditions of appointment may be obtained from the undersigned.

Applications, stating age, present occupation, experience, and qualifications, with copies of not more than three recent testimonials, to be delivered under seal to me, endorsed "Medical Officer of Health," not later than the 23rd day of JANUARY instant.

THOS. PHILLIPS, Clerk.

Town Hall, Aberdare.

January 9th, 1907.

(500)

SEAMEN'S HOSPITAL SOCIETY.

Consequent upon the promotion of Mr. J. G. Buckle, B.A., to be Assistant Secretary of the Seamen's Hospital Society, the office of Secretary at the Dreadnought Hospital is now vacant.

The post offers an opportunity to acquire experience in Hospital Management to gentlemen desirous of qualifying themselves for higher hospital appointments.

Candidates must be between 25 and 35 years of age. Salary £80, rising to £100 per annum, with partial Board in the hospital.

Application to be made to the undersigned, from whom further particulars may be obtained.

P. MICHELLI,
Secretary.

Dreadnought Hospital, Greenwich.

January 12th, 1907.

(773)

THE BEST NATURAL APERIENT WATER.

Hunyadi János

For LIVER COMPLAINTS, OBESITY, &c.

The "VIENNA MEDICAL PRESS" says :—

"Hunyadi János may be regarded as a specific for obesity."

AVERAGE DOSE.—A wineglassful before breakfast, either pure or diluted with a similar quantity of hot or cold water.

CAUTION.—Note the name "Hunyadi János," the signature of the Proprietor, ANDREAS SAXLEHNER, and the Medallion, on the Red Centre Part of the Label.

[3]

The Hospital

A JOURNAL OF

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VOL. XLI.—No. 1064.

SATURDAY, FEBRUARY 2, 1907.

PLEURAL EFFUSIONS AND EXPLORATION OF THE CHEST IN CHILDREN.

IN a recent lecture at the Medical Graduates' College and Polyclinic, Dr. Geo. S. Middleton, of Glasgow, discussed some of the diagnostic aspects of pleural effusions, and as several of his conclusions are of considerable practical importance, attention may here be fittingly directed to them. The lecture was concerned more particularly with pleural effusions occurring in children, and it was pointed out that in such circumstances the clinical evidences of effusion may correspond very closely to those attending pulmonary consolidation. In other words, whilst deficiency or absence of the respiratory murmur is to be expected when there is a collection of fluid in the pleural cavity, it does sometimes happen, in such cases, that not only is the respiratory murmur distinctly heard over the dull area, but it has also a markedly tubular character, thus resembling the condition which exists in pulmonary consolidation. Whatever be the physical explanation, this is the clinical fact, and failure to remember it accounts for many mistakes in diagnosis.

When decision has once been taken that there is a collection of fluid in the pleura, the next question is: What is the nature of the fluid? And this usually means: Is the effusion serous or purulent? To provide an answer to this question the textbooks advance a number of considerations which are said to incline the decision one way or the other; but Dr. Middleton boldly denies the validity of these, and states that there are no trustworthy signs in which confidence may be placed in the discussion between serous effusion on the one hand, and an empyema on the other. Quoting from his own experience, he finds an oscillating temperature, so often described as indicative of the presence of pus, to be not uncommon in cases of serous effusion, the presumed explanation being that such cases are of tubercular origin. As a parallel to this may be added the statement that a perfectly normal temperature, at least for a limited number of observations, is quite compatible with the presence of pus; even in considerable quantity, in the pleural cavity. Rigors and sweating are in exactly the same clinical position as a febrile temperature. Whilst often presented as proofs of the presence of pus, they, as a matter of fact, frequently accompany serous effusion, and, further, are often absent in cases of em-

pyema. Another attempted distinction is found in the statement that whispered pectoriloquy over the dull area means serum, not pus, whilst with a purulent effusion brochophony may be present. Clinical experience does not support this statement, and Dr. Middleton evidently has not the slightest confidence in it. Thus all the usual clinical distinctions attempted to be established by means of physical examination between pleural effusion on the one hand and pulmonary consolidation on the other, are found to be untrustworthy and unreliable. Localised bulging, redness, or œdema of the chest wall, no doubt mean pus, but to allow the diagnosis to wait for one or other of these events is hardly a creditable proceeding, seeing that if pus is present prompt removal is an essential part of an efficient scheme of treatment.

It thus appears that in the child there may be difficulty in distinguishing between pneumonic consolidation and pleural effusion; and also in deciding in the case of effusion as to the nature of the fluid. When such doubt exists, Dr. Middleton urges very strongly that it should be resolved by the aid of the exploring needle. Especially is this necessary in children under two years of age, who "succumb comparatively rapidly to empyema and rarely recover unless operated on at an early date in the disease." Some few months ago an article was published conveying a grave warning of the dangers of exploratory puncture of the chest and quoting eleven cases in which this procedure was said to have been followed by death. No one will defend a practice which regards exploratory puncture of the chest as a trivial proceeding and one needing neither preparation nor consideration. The demand for it only arises when doubt exists and when all other attempts to resolve the doubt have been exhausted. But because in occasional instances carelessness, or some purely accidental circumstance, has led to disastrous results, that is no reason for surrounding with an atmosphere of alarm a practice which under proper conditions has been found to be perfectly safe. Further, if the use of the exploring needle has its responsibilities, neglect to use it carries a not less serious claim. For, as Dr. Middleton pertinently remarks, children sometimes die as cases of "pneumonia" whose lives might have been spared had the needle been used in time.

DIETETICS.

In spite of our increasing knowledge of the metabolic processes of the human organism, we are still very much in the dark in regard to the influence of diet upon conditions of health and disease. Physicians are often led to dogmatise on questions of diet on a very slender basis of facts, and we find the most contradictory diets advocated, by different authorities, for one and the same morbid state. A vegetarian diet and also an exclusively meat diet, for example, have each found their advocates for the rheumatoid diathesis, and favourable results have been reported from each line of treatment. The truth seems to be that it is only within certain narrow limits that we are able to exercise any influence upon the intracellular chemistry of the organism by the nature of the food we present for absorption from the stomach and intestines.

Dietetic discussion now largely centres around the question of excess of food, and especially of the increased consumption of meat by the community. The consumption of meat in this country has risen from three pounds a head per annum in 1850 to fifty pounds a head per annum in 1902. It has been suggested that many evils which have increased, or are supposed to have increased, during this period, such as the greater frequency of cancer, the diminished birth-rate, and the spread of dental caries, may be attributed to this greater abundance of meat in the dietary of the community.

Professor Chittenden's work and views on the subject are already well known. He showed that soldiers and students leading an active life were able to keep in good bodily health, and to retain their weight, on a diet of very much smaller proportions, especially in proteid constituents, than was previously accepted generally, even by physiologists, as necessary. These results have been rather seriously impugned by Professor Benedict, of the Wesleyan University, Connecticut, who shows that the work done by the subjects of experiment, estimated in calories, exceeded the energy supplied by the food, and must therefore have entailed loss of body-weight. He further points out that the athletic students for the most part returned to their former diet after the experiments. They would hardly have done this if the experimental diet had been found to increase their chances of winning events for their University.

We are taught by physiologists that we should depend upon carbohydrates and fats for the fuel by the combustion of which we obtain the necessary energy for muscular exertion and other life processes, the proteid being requisite for the growth

and repair of the tissues. Accepting this theory, it is not difficult to show that the usual consumption of proteid is far in excess of the needs of the organism for tissue repair. The question then arises, Is this excess of proteid over and above the actual requirements of the body not only unnecessary, but harmful?

Dr. Chalmers Watson has endeavoured to contribute to the solution of this problem by studying the effects of an exclusively meat diet on rats. These investigations showed that an exclusive meat diet, especially when commenced very early in life, retarded the growth of the rats, reduced their powers of reproduction and lactation, increased the mortality in the second generation, and also led to certain definite changes in the thyroid gland. Dr. B. P. Watson, by a similar series of experiments on rats, confirms the effect of a meat diet on rats in reducing their powers of reproduction and lactation.

In America, where indulgence in food appears to be greater than indulgence in drink, the physician doubtless sees many such conditions arising from a too liberal diet, and Professor Chittenden's word of warning may be very necessary. In England, too, a physician practising among well-to-do people becomes impressed with the evils resulting from the overlaid table and the overlaid stomach. But there is also the other side of the picture. Medical men who attend the less fortunate portions of the community are only too familiar with those conditions of anæmia, malnutrition, neurasthenia, and general debility, in which a good meal three times a day would be of infinitely more service to the patient than any bottle of physic.

The value of the Weir-Mitchell treatment in neurasthenia, and of the sanatorium feeding in tuberculosis, are a direct negative to any wholesale denunciation of a liberal diet, proteid or otherwise. The comparison recently instituted by Dr. A. S. Arkle, of Liverpool, between children of different grades in society, shows the effect of insufficient food on the growth and development of the body and mind. A boy of good circumstances at eleven years, is equal physically to a boy of fourteen in the lowest grade of schools. In the Japanese Navy, when beri-beri had become a scourge of the severest nature, a more liberal diet was immediately followed by a wonderful reduction in the incidence and mortality of the disease, and by a marked increase in the physique and general well-being of the men. On the whole, then, we are led to believe that a community will be more efficient and suffer less of the "ills to which flesh is heir," on a full stomach than on an empty one.

ANNOTATIONS.

Street Noises in London.

THE deputation representing the Betterment of London Association, which waited on the Home Secretary on January 24 in reference to the noise and other disagreeable features associated with motor omnibuses and traction engines, represented, no doubt, a considerable amount of personal discontent and even actual suffering. But it may be questioned whether their case was wisely presented, and still more whether the speakers who submitted it exhibited a reasonable readiness to acknowledge the actualities of the position. Exaggerated phrases and denunciation suggest a somewhat narrow and personal view, which, whilst it has its due claim, cannot be allowed to dominate the situation. Whatever their faults, it cannot be denied that the motor omnibuses are proving an enormous convenience and benefit to large numbers of the hard-working section of the community; and to ask that all this shall be pushed to one side because the nerves of certain sensitive persons on the lines of route are upset by the traffic, argues a defective mental perspective. That the annoyance should be kept at the lowest possible level all will agree. Hence it is only right that in the selection of the lines of the motor-bus traffic regard should be paid to the character of the various neighbourhoods, and that quiet residential districts should, as far as possible, be preserved from disturbance. But even here it is the public convenience which in the last resort has to be considered. Again, it is eminently desirable that the noise created by public vehicles should be kept at a minimum. The deputation above referred to seemed to think that the Commissioner of Police was careless in this direction. But this is not in harmony with common experience. The noise and fumes arising from the motor-buses have in recent months distinctly declined, and we shall all be glad to see them at a still lower level. But to ask for the suppression of these buses in the interests of private individuals is a vain dream, and we are glad to see that the Home Secretary in his reply put the position in very plain terms.

The Necessity for Special Hospitals.

THE people of Salford and Manchester have shown marked liberality, in recent years, towards their medical charities. The latest instance is the subscription of £33,000 towards the £38,000 required to defray the cost of the new special hospital for Skin Diseases, in Quay Street, Deansgate. Sir Thomas Barlow, at the opening ceremony, expressed satisfaction that this hospital has been placed in the centre of a poor population, which pre-eminently needed its help. Voluntary hospitals, if they are to be of real service to the people, must go to the poor, rather than compel the poor to come to them—that is, they must select a site near the homes of those who constitute fit objects for free hospital relief. Skin diseases do not appeal, perhaps, to the sentiment of humanity, in the same way that many other diseases do. Yet skin diseases in many forms, though not of a crippling or vital nature, may markedly interfere with the joy of life, and prevent

the sufferers from following many occupations. Sir Thomas Barlow, had reason on his side; when he expressed satisfaction at municipalities taking pride in their cities, as shown by the exhibition of energy in the removal of everything that was either ugly or displeasing, and in securing fine boulevards and attractive public buildings, so that our great towns may be made as beautiful as possible. But there are other and more pressing claims which the poor town-dweller has upon the public and the authorities. Because it is right to beautify towns and make them as healthy and attractive as possible, it is even more essential to do what is possible to safeguard the human form divine, and to remove from the poorer residents every sense of bitterness and repining at their lot, by supporting a special hospital for skin diseases, which must, in the ordinary course of its work, do much to conserve that beauty in individuals, which is one of the joys of life. Probably, there are few diseases, which are more obstinate and intractable, than certain forms of skin disease. The longer adequate treatment is withheld, the greater is the discomfort and disability which result. We therefore congratulate the people of Manchester, upon their liberality and wisdom, in having built a modern, up to date, skin hospital. It should prove of the greatest advantage directly to the poor, and indirectly to the whole of the residents in this great commercial centre.

Leprosy in Cape Colony.

THE address on this subject recently given by Dr. Sutherland Black at the Medical Graduates' College and Polyclinic, has the special interest and value which are attached to the statements of one who has had long, intimate, and practical experience of the disease in question. After seven years' experience at Robben Island, where some 1,200 lepers are segregated, Dr. Black expresses his unhesitating conviction that the disease is communicable from one person to another, and he has found no reason to believe in the agency of any intermediate host. It is upon this view of the contagiousness of the disease that the Leprosy Repression Act and the isolation of the lepers at Robben Island are based, and, moreover, both the doctrine and the practice are generally accepted by the medical profession in South Africa. Notwithstanding all this, Dr. Black admitted that there were indications of a decided extension of the disease in Cape Colony, and that probably there are as many lepers at large as there are confined in the leper asylums. He also suggested that certain forms of the disease are only infectious during the existence of a brief and transient nasal ulceration. In reference to treatment, Dr. Black stated that he had found some good from creasote, but had obtained the best results from chaulmoogra oil in large doses. In spite, however, of the definite views on certain points, the lecturer recognised that even yet a great deal of uncertainty attends our knowledge of the pathology and management of leprosy, and he urged that a special commission should be sent out to South Africa to investigate the whole question.

MEDICAL OPINION AND MOVEMENT.

A DEPUTATION from the Infants' Health Society, including among its members Sir Thomas Barlow, Sir Lauder Brunton, and Mr. Mayo Robson, waited upon the President of the Local Government Board, and tendered him some valuable advice in view of the proposed Bill to legalise the establishment of milk depots by local authorities for supplying sterilised milk for infants. They pointed out that in the process of sterilisation milk loses in a great measure its nutritive qualities, and children fed on milk so treated were liable to develop scurvy and rickets, and were not entirely free from the dangers of zymotic diarrhoea. Recent reports from medical officers who have carefully investigated the matter have shown that the contamination of milk takes place largely in its transit from the source of supply to the consumer. What is most urgently needed is a thorough supervision of the handling of the milk right from the cow onwards. The deputation advocated refrigeration as an alternative to sterilisation. We understand that a joint committee of the National League for Physical Improvement, the National Health Society, and the Infants' Health Society, will shortly lay before the Local Government Board its practical conclusions on this question.

SIR A. E. WRIGHT's work on opsonins, and the consequent means of estimating the individual's power of reaction to the tubercle poison by taking the opsonic index, have given a great impulse to a more extensive treatment of tuberculous conditions by the injection of tuberculins. The "new" tuberculin, or tuberculin T.R., of Koch is generally used for this purpose. At University College Hospital, in several cases of tuberculosis requiring surgical treatment, injections of tuberculin have been made both before and after operation. The injections were controlled by estimation of the opsonic index, which was notably raised by them, and the excellent results which followed operation in each case suggest that a favourable influence was exerted upon the patients by these injections. Dr. H. D. McCulloch, of Bournemouth, has recently shown that the curative effect of the x -rays upon local manifestations of tuberculosis is also accompanied by increase in the opsonic index of the patient under treatment. He is of opinion that the therapeutic effect of the x -rays depends upon the induction of an auto-vaccination. The resolvent action of the x -rays on the encapsulating tissues about the tuberculous glands renders the vaccine accessible to the blood-stream. The applications of the x -rays were not accompanied by negative phases. This would suggest that the supposed vaccine liberated from the focus of disease by the x -rays differs in nature from the tuberculins prepared in the laboratory.

THERE is apparently an irresistible fascination to certain medical men to make themselves heard in the lay press and to pose as champions of the public weal, even at the risk of exciting prejudice against the profession to which they belong. An indictment against the profession such as Dr. James

A. Rigby has recently made in the *Independent Review*, is much to be regretted, as it can only have the effect of diminishing the confidence placed by the public in the profession, and, further, is wholly unwarranted by facts. In an article entitled "The Surgeon's Power of Life and Death," Dr. Rigby tells his readers that illegitimate and indefensible operations are undertaken nowadays with light-hearted irresponsibility, and that the issues of life and death are placed in the hands of inexperienced young men "quite callous and indifferent to the true welfare of their patients, whom they look upon merely in the light of subjects to be experimented and operated upon." There is a great deal more in the same strain, but the few words we have quoted are sufficient to show the nature of the allegations and the seriousness of the charges he brings against the profession. If Dr. Rigby or his colleagues are in the habit of calling in inexperienced and callous youths to operate upon patients we can only express surprise. So far as our experience goes, the scope for operative efforts by the younger members of the profession is very limited, and their work is not only jealously watched over by the more skilled veterans, but the public themselves display a very discriminating partiality for the surgeon of mature experience and settled convictions.

It is always interesting and instructive to know "how others see us," and especially pleasing to our vanity when the view is favourable. M. Montreuil, Director of the Salpêtrière, has recently paid a visit to the London hospitals and infirmaries, and his report to the Directeur de l'Administration Générale de l'Assistance Publique à Paris, has appeared in *Le Progrès Médical*. He finds much to praise and little to criticise in our methods and arrangements. He is deeply impressed above all else with the extreme cleanliness and orderliness that are displayed in every department of our institutions. He remarks that "This exquisite cleanliness is rendered possible by the habits and customs of the English people. The doctors are careful not to dirty the floors, and even the patients themselves show a consideration to which one is not accustomed in France." As he passes from out-patients to the wards, and thence to the operating theatre, he is continually filled anew with admiration for the cleanliness and well-being which prevail everywhere. He comments especially upon the decorations of the wards, the tables of flowers, the canaries in their cages, and the various other attempts to produce a bright and pleasing appearance. In fact, the whole report might be described as a song of praise of the cheerfulness and cleanliness M. Montreuil finds pervading all our public institutions. In commenting upon our fever hospitals, he expresses surprise that the linen was brought from the scarlet fever and diphtheria wards, and, without any precaution against infection, was taken by the ordinary route to the receiving room of the laundry; also that he himself was not asked to take any precaution either on entering or leaving the hospital.

HOSPITAL CLINICS.

ANTISTREPTOCOCCIC SERUM IN GONORRHOEAL AND OTHER INFECTIONS.

A Discussion at the Therapeutic Society, Apothecaries' Hall, London.

At a recent meeting of the Therapeutic Society a paper on "Some Further Experiences in the use of an Antistreptococcus Serum in Gonorrhoeal and other Infections" was read by Dr. J. Porter Parkinson. Dr. Parkinson said that in the few months that had elapsed since Dr. Soltan Fenwick and he read their previous paper before the Royal Medico-Chirurgical Society he was not able to bring forward a large number of new cases, but he could at least show some further encouraging results—results, too, which suggest that the rectal administration of this serum may have even a more extended application than was originally claimed for it. Dr. Parkinson first recapitulated shortly a case taken from the original paper by Dr. Fenwick and himself. A young married woman had been suffering for nine days from what was supposed to be acute rheumatism—she had severe pains and swelling in the right wrist and left knee, and had been feverish and delirious. On admission to the London Temperance Hospital she was delirious, with a hot dry skin, temperature 102° F., pulse 102, and respirations 28 to the minute. The right wrist was swollen and the skin of the dorsum of the hand was reddened, and pitted on pressure. Both knee-joints were swollen and contained fluid, and the right ankle and the dorsum of the right foot were puffy and swollen. The impulse of the heart was feeble, but in the normal position, and a soft systolic murmur was audible over the mitral area and conducted as far as the left anterior axillary line. There was a purulent discharge from the vagina and the uterus was fixed to the left side. The urine withdrawn by a catheter contained a trace of albumen. Though the general condition of the patient was in favour of pyæmia rather than of rheumatism, full doses of salicylate of sodium were ordered, and some of the vaginal discharge was collected for examination. Two days later the temperature had fallen to 100° F. and the pulse rate to 98, but the general condition of the patient was worse and the urine and fæces were passed into the bed. The vaginal discharge was reported to contain numerous gonococci. The salicylate mixture was then omitted and local treatment begun for the gonorrhoea, while a mixture containing quinine and iodide of potassium was given. In about a week the condition appeared unchanged, the temperature varying from 100° to 101° F., and the pulse being about 112. Then the temperature began to rise to 103° F. and the pulse to 120, and the respirations were 40 a minute. The tongue was dry, brown, and cracked, and the complexion had a sallow, earthy hue. The mitral murmur had

increased in intensity and a systolic murmur was heard over the aortic area; there were numerous rhonchi and rales over the right lung and pleural friction at the base of the left lung. Six days later the patient appeared moribund and was only kept alive by repeated injections of strychnine. She was quite unconscious, the pulse was feeble, and varied from 130 to 140 a minute. There were signs of oedema of the right lung and of a pleural effusion on the left side. A little turbid fluid drawn from the left side of the chest showed a few gonococci enclosed in the pus cells. In this desperate condition 10 cc. of the polyvalent antistreptococcus serum prepared in the Wellcome Laboratory was injected into the rectum.

The following day the temperature had fallen a degree and a half, but the pulse rate had not diminished. Another rectal injection of the serum was administered. On midday on the third day after the first injection the temperature had fallen to 98° F., the pulse was 108, and the respirations 34 to the minute; the patient was conscious for the first time, the motions were no longer passed into the bed, the aspect of the face had improved wonderfully, and she was able to swallow liquid nourishment with ease. The next day the temperature rose to 100° F., and continued at this point for a fortnight; this was attributed to the pleural effusion, as it gradually declined when the latter became absorbed, and in no way retarded the rapid progress of convalescence. The pain, swelling and stiffness of the affected joints disappeared within a week of the treatment by serum. Altogether three doses of the serum of 10 cc. each were administered within five days. The patient was discharged from the hospital after a stay of eight weeks. At that time the impulse of the heart was in the nipple line, and the mitral murmur though present was less loud than during the illness; the aortic murmur had disappeared. There were signs of adherent pleura at the base of the left lung. The urine still contained a trace of albumen, but the vaginal discharge had quite ceased. This patient was watched in the out-patient department for some months, and continued in perfect health.

This case is an example of three similar ones which have been successfully treated by this method, but as such cases are fortunately not very frequent, Dr. Parkinson has been unable to test the treatment further; in each case the recovery has been as prompt and successful as in the one quoted. In similar cases he suggested for the future an initial dose of 20 cc. of the serum.

The following case, also extracted from the previous paper, shows the result of this treatment

in a case of poly-articular gonorrhœal arthritis, usually called gonorrhœal rheumatism. A young married woman was admitted suffering from pain and swelling of the wrists, ankles, and knees. Two years previously she had had an attack of gonorrhœa, followed by severe "rheumatism" for which she was confined to bed for six weeks. She had also had two attacks of "peritonitis." The present illness began a fortnight before admission with a purulent discharge from the vagina and swelling of the wrists and left ankle. The temperature was 101° F. and the pulse rate 88. There was a profuse vaginal discharge containing gonococci in abundance. The wrist joints were swollen and tender, and a puffy swelling extended several inches up the dorsal surface of each forearm. Any movement of the wrist or fingers caused great pain. The left ankle and knee were also affected. The patient was treated by antiseptic vaginal douches, followed by swabbings with a two-per-cent. solution of Protargol, and internally large doses of salicylate of sodium combined with quinine were given. Radiant heat was used to the affected joints. The temperature fell to normal after eleven days' treatment, and the vaginal discharge diminished, but the condition of the joints remained unaffected, and the right knee and ankle became swollen and tender. After another fortnight's treatment by iodide of potassium, etc., there was no improvement in the condition of the joints, though the temperature remained about normal. The treatment as above was now abandoned and 10 cc. of the polyvalent serum was injected into the rectum every other day for three doses. By the sixth day the pain had almost disappeared from the ankles and knees, and the swelling of the wrists and forearms had subsided completely, leaving only a certain amount of stiffness and tenderness on movement. In another week this also had subsided, and the patient was discharged cured a fortnight later.

These cases were selected as types of those treated during the early or experimental stage of the work, and in them the usual methods of treatment were tried before resorting to the use of the serum. They are not, therefore, to be met by the argument that they were of that mild type in which rest in hospital and antiseptic vaginal douches are all that is necessary to effect a cure. Again, it will be seen that the effect of the serum is so prompt that it is impossible not to believe that the improvement is due to its use. Dr. Parkinson went on to show the value of the treatment in various types of joint affections associated with, or caused by, gonorrhœal disease. First among these may be mentioned the *arthralgic* type in which there are wandering pains about the joints without redness or swelling. This variety may persist for years.

The author recently saw a gentleman, aged over sixty, who had had gonorrhœal infection when a young man, followed by what was considered to be "rheumatism" three years later, during which condition, however, the urethral discharge reappeared. The attack crippled him for some weeks; it was followed by stiffness of the joints, and this had

increased considerably during the last ten years. It frequently necessitated him mounting stairs on his hands and knees, and caused pain and difficulty in getting up from a low chair. The joints were not obviously enlarged or the ends of the bones thickened. Five or six months ago he was treated by three rectal injections of serum on alternate days, with the result that the pain and stiffness gradually improved, and for the last few months he has been able to walk and use his limbs freely and without pain. He now describes himself as better than he has been for many years. Dr. Parkinson had a letter from this gentleman on November 22, in which he says: "I have been absolutely free from everything connected with the rheumatic annoyance; I was nearly three months getting rid of the effects of previous annoyances, though all rheumatism proper ceased at the end of July. The serum seems to have been an absolute success in my case."

Another case of chronic arthritis was that of a charwoman, aged 52, who has suffered from "chronic rheumatism" for ten years; this has successively affected the feet and ankles, elbows, hands, and knees; the trouble was at first only at intervals, but since November 1905, became constant, and about that date she came under Dr. Parkinson's care as an out-patient. There was some thickening about, and effusion into, the knee-joints. She was treated with iodide of potassium and quinine, as well as locally, but with only moderate improvement. On November 5 she complained of much pain in the right metacarpo-phalangeal joints, and there was much peri-articular swelling extending up the dorsum of the hand. She was given 20 cc. of the serum per rectum, and three days later the pain and swelling had quite disappeared. On November 15, however, the left hand and wrist became similarly affected, and another injection was given with equally rapid improvement. She was seen twice in December, and has had no more pains of any kind. This patient had never had rheumatic fever, but used to suffer severely from leucorrhœa.

Chronic hydrarthrosis, usually monarticular, and especially involving the knee-joint, seems often to be associated with a prolonged gleet or stricture of the urethra. The effect of the serum does not seem to be as satisfactory as in other varieties. The fluid may disappear from the joint, but there is frequently considerable stiffness and extra-articular swelling which may persist for some time just as in cases not treated by the serum method.

The *bursal and synovial* form of the disease, which attacks chiefly the sheaths of the tendons, bursæ, etc., may occur along with more serious forms in which endo- and peri-carditis, pleurisy, and evidences of a general affection are present, and in these the effect of the serum is remarkable; the first case related is an example of this form. In other cases, the disease is more limited to the bursæ and sheaths of the tendons, and though in some rapid improvement has resulted from the treatment, in others the disease has appeared to run its course uninfluenced by it. In these latter cases there has usually been a urethral stricture.

In the other varieties, such as the *polyarthritic*, the *septicæmic*, and the *acute arthritis* of one or two joints, the polyvalent serum appears always to effect a rapid and permanent improvement.

The fact that in various cases treated by Dr. Fenwick and Dr. Porter Parkinson the urethral discharge disappeared along with the other phenomena, led them to try the effect in cases of acute gonorrhœa. Their experience has been limited by paucity of material, but in those treated the urethral discharge has disappeared within a week, when treated solely by serum rectal injections. Mr. Paterson, surgeon at the Lock Hospital, states, however, that in acute gonorrhœa the treatment is not very efficacious, but he corroborated the previous evidence as to its value in certain cases of gonorrhœal arthritic infections.

Here the author drew attention to the interesting fact, mentioned in the previous paper, that Dr. Dowson, the director of the Wellcome Laboratories, has found that while the gonococcus grows readily in a medium to which the antigonococcic serum had been added, it failed to grow in the presence of the polyvalent antistreptococcic serum, and this observation he has confirmed by further experiments.

In some cases of purpura hæmorrhagica the rectal use of this serum is followed by immediate improvement, as witness the following extreme case.

A warehouse porter, aged 22, had been the subject of pulmonary phthisis for six months. Two days before admission he felt ill, red spots appeared on the legs and trunk, and blood began to issue from the mouth; the next day blood appeared with the urine and the stools. On admission he was very weak and anæmic, the temperature was 97.2° F., pulse 106, and respirations 34. The muco-purulent sputum contained numerous tubercle bacilli, and there was evidence of consolidation of the upper part of the left lung, and moist rales were heard over both bases.

Over the whole of the body and limbs were purpuric spots varying in size from a pin's head to a sixpence, and here and there larger ecchymoses. The tongue, lips, gums and palate were pale and covered with petechiæ, and blood constantly dripped from the mucous membranes of the mouth and nose. The urine was dark with blood and became almost solid on boiling; on standing it deposited nearly half its bulk of red blood corpuscles. The stools were loose, consisting almost entirely of altered blood. A blood-count showed only 60 per cent. of red blood corpuscles. The patient got rapidly worse and the bleeding from the mucous membranes and internal organs became more profuse. The pulse became feeble and intermittent, and partial consciousness alternated with muttering delirium. Some œdema of the legs appeared. At this stage the patient appeared to be inevitably dying, and though a good result was hardly to be expected, 10 cc. of polyvalent serum were injected into the rectum, and this dose was repeated at 6 p.m. The next day the man was much better, the pulse was 96 and of higher tension, the bleeding from the gums had almost ceased, and the urine and

stools contained much less blood. The next day the temperature had risen to 99° F., and the pulse declined to 90. All bleeding had ceased from the gums and bowel, and the urine was only slightly smoky. Two more injections were given, and five days after admission the patient appeared to be convalescent. The purpuric eruption rapidly faded, and three weeks later the patient was discharged well except for his pulmonary trouble. Cultures from the blood exhibited no bacterial growth. Since this case two more patients suffering from severe purpura hæmorrhagica have been treated in the same way and with a rapidly successful result.

While, therefore, not suggesting that this serum is a specific for all such cases, it seems only logical to consider that it is worthy of further trial, especially in view of the fact that no harmful results follow its use.

Dr. Parkinson has recently tried the serum in cases of *fibromyositis*, such as lumbago and the painful swellings in the deeper muscles attached to the scapula, and has had a fair proportion of cases in which the treatment has been most successful, but it is difficult to be quite sure of the effect of any treatment in conditions like these, which are sometimes very fugitive and may disappear spontaneously; and also when, as is the case of hospital patients, they may be lost sight of after one or two attendances.

The following notes were taken from such a case. A married woman, aged 40, had suffered for four-and-a-half years from chronic pains, chiefly in the muscles, intensified on movement and specially marked after a rest. She had also occasional pain and stiffness in the right hip-joint. On and off there has been leucorrhœa. There was nothing abnormal to be made out on examination, and the heart was normal. One injection of 20 cc. of the serum relieved the muscular and arthritic pains, and the leucorrhœa ceased within a week.

The pathology of so-called chronic rheumatism of joints and muscles is still very obscure, though there is but little doubt of their connection with certain microbic diseases of which gonorrhœa is one. When these organisms get into the blood-stream they may lodge in fibrous structures and there produce a local reaction with inflammatory proliferation of tissue, which accounts for the racking pains present in chronic muscular rheumatism.

At present it seems impossible to determine which organism is the causal factor in a particular case, but these therapeutic experiments show that a fair proportion yield rapidly to serum treatment even in the absence of any other medication.

As the polyvalent serum is prepared from 43 different strains of streptococci it may be certainly designated a "shot-gun remedy," but till our knowledge is greater it appears to be a useful weapon, and we do not yet know to which of the different strains of micro-organisms the effect is due.

Dr. Parkinson hoped there would be a more extended trial of the remedy, as the results already obtained seemed amply to justify its further use.

Dr. Hope read a paper on the use of anti-diphtheric serum in tubercular disease. He came

to the conclusion that while diphtheria antitoxin was an aid to the treatment of the disease in its early stages, it was of no value in the chronic and advanced stages of phthisis.

Dr. William A. Potts, Birmingham, said it had been recognised for some time that diphtheria antitoxin was an excellent remedy in many cases of bad throat where the poison was not necessarily the diphtheria bacillus, and where the mischief was due to other organisms. It is not necessary to wait until the bacterial investigation of the swab has been made; the antitoxin is extremely useful in such cases, and there is no inherent improbability in its being useful in such cases as Dr. Hope had described. He desired to know whether in the investigations any trouble had arisen from the intense irritation caused by the injection of the serum. He had a lively recollection in his own person of such a phenomenon which lasted three days, and caused him to hesitate to use it again. No remedy seemed to be able to relieve the irritation.

Dr. Herbert French asked whether the anti-streptococcic injection had been used with the ordinary enema tube, and whether it had been diluted or undiluted. He referred to the use of the opsonic index as a means of testing the value of the treatment. If it did good, one would imagine an increase of the opsonic index to occur. In healthy people the injection of anti-diphtheric serum caused no change in the tuberculo-opsonic index. In tuberculous people inoculated with anti-diphtheric serum some change might occur. If it did good it would be proved by a rise in the opsonic index, and in that way one would have a guide as to when the injection should be repeated, say, in ten days or two weeks. He had met a medical man from Australia some time ago with notions of the value of anti-diphtheric serum in tuberculous disease who could not get his book published in London. There was apparently great value obtained in giving these serums per rectum. Sir Dyce Duckworth had said that in infectious endocarditis much benefit was obtained by giving the serum per rectum. In a bad case of erysipelas in Guy's Hospital the patient was relieved within 24 hours of giving one phial of 10 c.c. per diem per rectum. The treatment was continued for three days. The dangerous condition recurred when the injection of serum was suspended. It was resumed in 10 c.c. doses with good results. In that patient there was no irritation.

Dr. Bentley, Limpsfield, Surrey, had tried the remedy in several cases of consumption. Three of the cases were too far advanced. One case had tubercle of the larynx, with thick cushion-like epiglottis, and one lung was affected. He treated it once a fortnight for six weeks with anti-diphtheric serum. The larynx improved and the lung disease did not extend. The patient felt better, took more exercise, got up hills better, and was beginning to gain weight. He kept up the injections until the patient began to be quite intolerant and exhibited irritability towards the serum; it was therefore stopped for three months. The other lung showed some signs of breaking down, and the

feeling of lassitude returned. The injections were renewed, and the patient began to improve at once.

Dr. Ross, Perth, said he had made a study of the subject in the way of reading, but could find no authority whose advice would lead him to give the anti-diphtheric serum by the mouth, although some authorities held that it was equally efficient given in that way. If it should happen that diphtheria antitoxic serum could be given by the rectum or by the mouth, it would be very important for the general practitioner who might have cases requiring repeated injections at long distances apart; if one could confidently say that it would act as well by the mouth it would save many a long journey in country practice. Some definite ground, however, is required to proceed upon, but if it could be devised the mouth administration would be a great advantage. At the last meeting of the British Medical Association the question was rather shirked, and none of the superintendents of the London fever hospitals appeared to care to risk the administration of it by the mouth or rectum.

Dr. Porter Parkinson, in reply, said that in most of the cases of single-joint infection he had not thought it advisable to put a needle into the joint, the infusion had disappeared with strapping, and it was not necessary to remove the fluid for treatment. With regard to the kind of serum used, the only one which he had employed was the polyvalent anti-streptococcic serum prepared by Burroughs Wellcome and Co. at their laboratory, which consisted of 43 different strains of organisms. He had no information concerning the effect of the gonococcus itself, but the gonococcus grew quite well in a culture to which anti-gonococcic serum had been added. The first case treated was absolutely a shot in the dark, and he was surprised to hear the day following that the patient was still alive. The results in chronic rheumatism were good. It may be that in the cases treated the gonococci may have been latent for years. These chronic cases of articular rheumatism may be produced by the poison. If the serum is useful in some kinds of rheumatism it may be useful in others. Irritation of the skin, Dr. Porter Parkinson thought, was only produced when the injection was made under the skin. In the case he had to deal with it had been injected into the rectum by means of an ordinary glass syringe with a catheter, the antitoxin being poured into the syringe in the usual way, and its own weight being sufficient to secure its entrance. No bad effects have ever happened. The method is not new, but has been proceeding for six or seven years. It was first alluded to by himself in a letter to the *British Medical Journal*, six years ago: since that time many persons have used it and published cases on it. In cases of diphtheria, rapidity of application is the principal thing, and so it is essential to make the injection under the skin in that disease. In one case he had injected 4,000 units by the rectum. He supposed that the child must have been ill for 36 hours before he saw it. The child lived, did fairly well, and eventually recovered. But he could not advise this method in diphtheria, as absorption is probably more rapid when given subcutaneously.

POINTS IN DIAGNOSIS.

PERNICIOUS ANÆMIA AND ITS DIAGNOSIS, ESPECIALLY IN OBSCURE NERVOUS CONDITIONS.

THE epithet "pernicious" is perhaps unfortunate in connection with this disease, because to many it conveys the idea of "hopeless," or even of "rapidly fatal." This is erroneous, for many patients suffering from pernicious anæmia survive for years, and sometimes the improvement under treatment is remarkable, even though such improvement be maintained only for a time. The condition is, of course, less hopeful the later it is diagnosed, and the later suitable treatment is adopted. It behoves us all to be able to diagnose the condition early, and to diagnose it we must be on the look-out for it.

The clinical picture in a typical case is well known; the pale yellow waxy appearance of the face and body, the lassitude and weakness, and particularly the absence of wasting, or rather the persistence of a flabby stoutness, are the three most obvious signs of it. It is, however, late in the disease before these three signs are all well marked; in the earlier stages the condition may not even be suspected unless a blood examination is made to determine the nature of an anæmia which may not as yet be very marked. By so doing it will be found that pernicious anæmia is by no means excessively rare. It is true that many suspicious cases will prove negative, and patients may be put to the expense of blood examination apparently without cause; but in the negative cases it is well worth while to know that there is no incipient pernicious anæmia, and in the positive cases the early diagnosis is all-important. It is so easy nowadays to have a complete blood examination made at a small cost by sending specimens to one of the clinical research laboratories who supply all the apparatus needed for the purpose.

The pathognomonic features of the blood are, first and foremost, the high colour index of the anæmic blood; and, secondly, the appearance of the blood films. The "colour index" is the ratio of the hæmoglobin to the red corpuscles. In healthy blood the amount of hæmoglobin is arbitrarily called 100, the normal number of red corpuscles being also called 100; thus in healthy blood the colour index is $\frac{100}{100}$, or 1. In almost every form of anæmia, except pernicious, the hæmoglobin is diminished either in the same proportion as are the red corpuscles, or else in greater degree, so that the colour index is either 1 or less than 1. In pernicious anæmia, on the contrary, the hæmoglobin, though diminished, is less diminished than are the red corpuscles, so that the colour index is greater than 1. For example, if the red corpuscles were down to 30 per cent. of normal, the hæmoglobin might only be down to 40 per cent. of normal, so that the colour index would be $\frac{40}{30}$ or 1.3. This high colour index in the presence of anæmia is pathognomonic of pernicious anæmia.

If circumstances prevent us from estimating the hæmoglobin and the number of red corpuscles per

cubic millimetre, it is still possible to make a shrewd guess at pernicious anæmia if we make films of the blood and examine them under a high power. Not only will many poikilocytes be seen, but there will be great variations in the sizes of the corpuscles, with a predomance of large red blood discs or megalocytes. An anæmia with preponderance of megalocytes in the blood films is almost certainly pernicious anæmia; but this method of diagnosis is less reliable than is that of estimating the colour index.

When pernicious anæmia is only suspected in the late, and therefore more hopeless, cases, its diagnosis will be from other forms of severe anæmia, such as cancerous cachexia, particularly cancer of the stomach; syphilitic cachexia, malarial cachexia, lardaceous disease, fungating endocarditis, chronic tubal nephritis; the anæmia produced by intestinal parasites such as *bothriocephalus latius* or *ankylostoma duodenale*; myxœdema, rectal polypi, menorrhagia, Addison's disease. It is not with these that we will deal just now, but rather with the difficulties in the earlier stages; and of the earlier conditions in which other symptoms attract the attention so much that pernicious anæmia may never occur to one, those of nervous diseases are very important.

It is no new observation that various slowly progressive degenerations can occur in the spinal cord in cases of pernicious anæmia. It is not generally recognised, however, that such degenerative cord changes are by no means restricted to the late stages, but may occur so early as to seem to be the primary condition. The spinal changes may be so gradual that at first neurosis may be diagnosed. In obscure cases of cord disease associated with even only slight anæmia it is well to examine the blood. Dr. G. Lovell Gowland has recently published a number of such cases. The following is another instance.

An elderly lady began to feel weak in her legs, and suffered from severe but obscure pains in different parts of her back, abdomen, and lower limbs. She felt "as if she were about to become paralysed." She went to two different special hospitals for nerve diseases, and saw the best nerve specialists upon many occasions. After careful examination none of the distinctive signs of an organic nerve lesion could be found. She was assured that the trouble was functional and not organic, and she felt reassured for a time. For over two years, however, the pains not only persisted, but got gradually worse, until finally she was unable to endure the fatigue of dragging herself as far as the hospital. It was only at this time that her plantar reflex, previously flexor, became at first doubtfully, and then definitely, extensor (Babinsky's sign). The presence of organic disease of the cord was further

confirmed by the development presently of retention of urine with overflow, necessitating catheterisation twice daily. At this time the blood was examined; the hæmoglobin was 58 per cent. of normal, the red corpuscles were 32 per cent., so that the colour index was $\frac{58}{32}$, or 1.8. The films were typical, and there was no leucocytosis. The condition was pernicious anæmia; and it was then recalled that her general appearance had been compatible with the presence of pernicious anæmia for over two years past.

This case by itself would be of little value; but Dr. Gulland says he has found many similar cases, in which pernicious anæmia was lost sight of on account of the prominence of nerve symptoms.

Remembering this, many of us are sure to come across similar instances in practice; but the diagnoses will not be made early unless blood-counts are carried out in a considerable number of cases, in which the anæmia falls short of the lemon-yellow colour of typical pernicious anæmia.

TREATMENT OF CHOREA WITH ACETO-SALICYLIC ACID.

It is always difficult to be sure whether any particular remedy is actually curative when administered in a given disease; but there seems to be little doubt about the good results of giving aceto-salicylic acid in cases of chorea. In a most interesting paper, read before the Therapeutical Society by Dr. Cecil Wall, the matter was fully dealt with recently. Dr. Wall's conclusions will probably be tested by large numbers of medical men in general practice.

Aceto-salicylic acid is, we are told, the chemical name for the active principle of a well-known proprietary medicine—*aspirin*. In order to test its efficacy in chorea, several hundreds of cases were dealt with. They were taken consecutively just as they came, mild or severe, without selection. Different methods of treatment were adopted for different consecutive batches of cases, and the basis for comparison of results was the duration of the movements. In all cases the general treatment, apart from drugs, was similar in the different batches, so that the results are comparable with one another.

When general measures alone were adopted, without drugs other than some iron preparation or possibly cod liver oil, the duration of the attack varied from 1 to 24 weeks, 30 per cent. lasting longer than 12 weeks and 52 per cent. longer than 8 weeks.

When arsenic was administered every known method of giving this remedy was tried, and the dosage was varied both upwards and downwards to the fullest extent; but the average duration of the attacks of chorea was little different to that of cases in which only iron or cod liver oil was given. Dr. Wall came to the conclusion that arsenic is very far from being the drug for chorea—at any rate in cases arising in or near London. It is possible that chorea in the North of England differs from chorea in the South, owing to differences of temperament in the patients or some other cause; for it was in the North that arsenic was first vaunted as the specific remedy for chorea.

When sodium salicylate was the drug given 42 per cent. of the cases remained choreic for more than 12 weeks, though 54 per cent. were cured in less than two months.

When aceto-salicylic acid (*aspirin*) was used no case continued choreic for more than 12 weeks, and in 92 per cent. of the cases the movements had ceased in less than two months. The relative values of the four lines of treatment are well brought out in this table:—

| | Cases treated with Arsenic. | Cases treated with Sodium Salicylate. | Cases treated with no particular Drug. | Cases treated with Aceto-Salicylic Acid. |
|---|-----------------------------|---------------------------------------|--|--|
| Proportion of Cases cured in less than three months | 69 | 58 | 70 | 100 |
| Proportion of Cases cured in less than two months | 33 | 54 | 48 | 92 |

The figures are sufficiently striking, and speak for themselves. They mean, if subsequent experience confirms them, that in aceto-salicylic acid we have a remedy which will enable choreic children to return to school about a month sooner all round than is possible when other remedies are employed.

In regard to the method of administration, the drug is given as a powder (not as pill or tablet) in 10-grain doses three times a day for a child of 6; 10 grains four to six times a day for a child of 8 to 10; for a child of 12 or over, 20 grains every two hours for six doses, and then continued in 10 to 20-grain doses three times a day. Buzzing in the ears or vomiting are two of the least unlikely ill-effects, and hæmaturia has been observed in rare cases; but ill-effects of any kind are usually nil.

To some extent the aceto-salicylic acid acts in chorea as bromides do in epilepsy, or as sodium salicylate does in acute rheumatism; that is to say that whilst the symptoms subside comparatively rapidly under its use, they are apt to reappear if the drug be stopped too soon. It is best to continue with the aceto-salicylic acid for a fortnight or three weeks after the chorea has ceased; but the patient, provided there be no cardiac or other indication to the contrary, can return to school and lead an ordinary life meanwhile.

PRACTICAL NOTES ON DIAGNOSIS AND TREATMENT.

Dyspepsia and Flatulence.

SUB-GALLATE OF BISMUTH (dermatol) has been found, in ten-grain doses after meals, almost a specific in cases of purely functional dyspepsia and flatulence.—*Dr. Flint.*

Nutrient Enema.

THREE ounces of beef-tea, prepared without salt, are to be added to an ounce of hot water. The enema must be comfortably warm, about 100° F.; if too cold or too hot it will not be retained.

Counter Irritation in Chronic Bronchitis.

SOME stimulating liniment should be rubbed thoroughly into the chest night and morning. What I generally use is the turpentine and acetic acid liniment of the Pharmacopœia. The benefit is usually most marked where there is emphysema, and in these cases a croton oil liniment is often most useful.—*Dr. T. H. Green.*

Drugs in Acute Bronchitis.

At the onset of acute bronchitis ipecacuanha is the most useful drug. Do not be afraid of it—ten or fifteen minims every two hours for the first day or two of the illness, or until the expectoration is free and the skin perspiring. Tartar emetic might be used much more frequently than it is, and apomorphine is also a useful drug.—*Dr. T. H. Green.*

Diarrhœa in Enteric Fever.

If the diarrhœa is so great as to be exhausting to the patient's strength, and the patient is on an almost exclusively milk diet, you should first examine the stools for the presence of milk-curds; and if these are found to be present, alter the diet to beef-tea and to milk well diluted with lime or soda (not merely carbonated) water, and give small doses of bismuth. Never be in too great a hurry to adopt any powerful astringent treatment.—*Dr. Curnow.*

Angina Pectoris in Gouty Patients.

ANGINA in the gouty requires our most penetrating attention, and there are those who require, even it may be in excess of their usual habit, perhaps one of those very things that in the unwisdom of routine we might be inclined to cut them off. Certainly there are some to whom port wine, champagne, or cream or butter or sweet stuff—to name the reputedly most obnoxious articles that occur to me at the moment—will, each in its place and opportunely, bring healing on its wings.—*Dr. Goodhart.*

Treatment of Iritis.

In the early stage of iritis, if the pupil can be fully dilated and maintained in dilatation, the inflammation will die out harmlessly; and hence in this early stage it frequently happens that no other treatment than the application of atropine is required. On the other hand, when the effusion has had time to acquire firmness, and when the dilator muscle is weakened by inflammation, it is very possible that the adhesions may resist atropine. Our sheet anchor then is mercury.—*Mr. Brudenell Carter.*

Hæmoglobinuria and Raynaud's Disease.

It is a well-known fact that these two conditions may occur in one and the same patient.

Purulent Expectoration in Bronchitis.

WHEN the sputum in chronic bronchitis is copious and puriform, mineral acids with strychnine or quinine are often of great service—more so than the gum resins.—*Dr. T. H. Green.*

Ærated Milk.

MILK charged with carbonic acid gas may be used for patients with feeble digestive power and where a change from ordinary milk is required. It is both more palatable and more refreshing than ordinary cow's milk.

Tabes Dorsalis.

To relieve the lightning pains of tabes dorsalis, phenacetin in 8 grain doses may be given every half-hour for four doses. It is well to keep the patient lying down during, and for some time after, the administration of the drug.

Fermentative Dyspepsia.

THE following is a prescription of the late Dr. B. W. Richardson:—Creosote ℥xij, proof spirit 3ss, benzoate of ammonium ʒij, glycerine ʒvj, infusion of cloves to ʒvj. Dose: A tablespoonful in a glass of water after food.

Bronchitis with Difficult Secretion.

THE following is useful in that form of chronic bronchitis where there is difficulty in coughing up the secretions:—Oil of turpentine ʒij, mucilage of acacia q.s., cinnamon water ʒj, water to ʒvj. Dose: A tablespoonful every four hours.

The Nasal Mucous Membrane in Anæmia.

THE mildest of the conditions in which there is dryness of the nasal mucous membrane is simple anæmia, where we have collapse of the erectile tissue, insufficient supply of blood to the mucous glands of the inferior turbinated body, and consequent diminution of the secretion. This condition is not a disease, but simply a symptom of general anæmia.—*Dr. Greville Macdonald.*

Injury to the Back.

NEVER treat lightly a case of injury to the back, no matter how trivial the cause may be. If there is the least indication of interruption of bladder power, or if there is ever so little tingling about the hands, feet, or trunk, such a case may prove disastrous, and should be treated at once as being serious.—*Sir Wm. H. Bennett.*

Furunculosis of the External Auditory Meatus.

In the early stages of the inflammation instil frequently a solution of boracic acid in equal parts of rectified spirit and water, gradually diminishing the proportion of water until the patient can bear the application of the undiluted spirit. Apply hot fomentations or boracic poultices. Also gently insert elongated plugs of cotton-wool soaked in glycerine to which a 20-per-cent. solution of cocaine has been added. As soon as there is the slightest indication of the formation of matter a free incision should be made.—*Mr. H. E. Cumberbatch.*

THE PLAGUE OF 1348-50.

RECENT accounts from India, Afghanistan, Mauritius, Hong-Kong, Japan, Russia, and Spain say that cases of plague have occurred. In India it is epidemic, but the outbreak at last appears to be on the wane. It is so long since the plague devastated England that the British public takes only a languid interest in the subject, and when the plague is spoken of reference is usually made to the outbreak which occurred in London in 1665. But even this visitation, great as it was, was dwarfed by the epidemic of 1603, and both sink into insignificance beside the awful years 1348-9, when the Black Death destroyed nearly a third of mankind and induced Brother John Clyn, of Kilkenny, to add a blank sheet of parchment to his chronicle "to continue it, if by chance anyone may be left in the future, and any child of Adam may escape this pestilence and continue the work thus commenced." The Black Death, as it came to be called after the Great Pestilences of 1603 and 1665, was pneumonic in character at the beginning, and was as fatal then as is this form at the present day. In the later stages, when the more resistant alone survived, it became chronic and of the ordinary bubonic type, with the usual lessened mortality. In London 200 bodies of the dead were buried daily in East Smithfield, Aldgate; and in the Charterhouse, where now is "High Level" in the playground of the Merchant Taylors' School, it is said that more than 50,000 persons were buried. This number may reasonably be looked upon as apocryphal, but the deaths were so numerous as to lead to the most serious economic crisis. The year 1348 found England mediæval; the year 1350 left her at the beginning of modern history. Religion no longer existed in its old magnificence of ritual, for the educated clergy had died and their place was taken perforce by those who could often do little more than read and write. The dreadful scenes of the previous years had made men deeply and personally religious; gilds became more numerous than ever, and out of the gilds soon came the great City companies. Whole tracts of country remained uncultivated, owing to the scarcity of labour, and then came the golden time of the poor. Statute after statute was passed to regulate the supply of labour and the rate of wages, but all without success. The labourer was triumphant, and labour began to understand its value and assert its power. The mediæval serfdom of England disappeared, the population was detached from the soil, and the old custom of holding land in small tenancies by a class of tenant proprietors gave place to a small body of men who held large tracts of land directly from the crown and farmed it on lease. The Black Death, too, is responsible to a large extent for the use of a common English language. French was the common talk of the upper classes throughout the country, but from the time of "the first Murrain this manner of spekyng was some dele y-changed," and the children of the nobility and gentry were taught their lessons in English, for the clergy who had hitherto acted as teachers and schoolmasters were dead, and there were but few learned per-

sons to take their place. Even the very architecture changed, and long years often elapsed before the great church buildings in progress at the time of the plague were brought to a successful issue. It took England very many years to recover herself from the shock of the two-years' plague, and in the cases of some of the religious houses there is good reason to suppose that they never recovered themselves even to the time of the Reformation, when they were finally dissolved. Besides this Black Death all other plagues sink into insignificance. It seems to have been truly pandemic, whilst its predecessors and successors were fortunately epidemic. The reason for its wide distribution and great mortality appears to have been due to the pneumonic character of the outbreak, the pneumonia being, perhaps, associated with climatic conditions. The chronicle tells us that in 1348 it rained either by night or by day with hardly an exception from St. John the Baptist's Day (June 24) to Christmas; whilst in the Great Plague of 1665 it was a dry and warm year, with abundance of flies; and Samuel Pepys says that people were glad when the rains and frost came.

EDITOR'S LETTER-BOX.

"THE RATIONAL USE OF DISINFECTANTS."

To the Editor of THE HOSPITAL.

SIR,—In reference to the above very interesting article, which appeared in your issue of January 5, we feel sure you will allow us to make a few comments.

In referring to Izal disinfectant, Dr. Divine remarks that we have followed Jeyes' Company recently in guaranteeing a germicidal power in definite and scientific terms. We think Dr. Divine is under a misapprehension. If he suggests that we have adopted the pure culture method of standardisation as formulated by Dr. S. Rideal and Mr. A. Walker, managing director of Jeyes' Company, he is in error, for we hold with Mr. Winter-Blyth, Professor Kenwood, and most advanced experts, that this "pure-culture" method is quite useless in standardising disinfectants which will be used in impure media. If, on the other hand, he suggests that we were later than Jeyes in advocating bacteriological in preference to chemical examination for disinfectants, the exact reverse is the case. Bacteriological work was done with Izal at our suggestion, even before 1892, in which year was published Professor Klein's report on its behaviour towards a variety of disease germs. At this time, and for many years later, we know of no other firm of disinfectant manufacturers who expressed the slightest interest in bacteriological examination. Messrs. Jeyes were, indeed, circulating a pamphlet entitled "Facts About Disinfectants," by Hebling and Passmore, which strongly upheld the chemical as against the bacteriological method. Bacteriological examination has for over fifteen years been a foremost principle with us, and we hope before long that scientific experts of standing will provide us with an adequate method of standardisation. Such a method must, in our opinion, compare disinfectants under circumstances as nearly as possible akin to those met with in practice.

Yours faithfully,
 NEWTON, CHAMBERS AND CO., LIMITED.
 The Laboratories, Thorncliffe, near Sheffield.
 January 15, 1907.

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

CURRENT HOSPITAL TOPICS.

Melbourne Dental Hospital.

THE inhabitants of Melbourne have generously determined to build a new Dental Hospital and to equip it in all respects for the thorough study of modern dentistry. The cost of the new building is estimated to exceed £10,000, and the plans have been prepared in competition by Messrs. Campbell and Kernot. The buildings will be of three stories, with a lecture theatre for 100 students.

Workmen's Contributions: a Record.

MR. FOREMAN, one of the treasurers, stated at a recent meeting that the workmen of Sir W. G. Armstrong, Whitworth and Co., Limited, employed at the Elswick Works, had raised in penny subscriptions in the last eighteen and a half years £38,685. Of this sum £27,233 had been given to the Newcastle Infirmary. The balance had been distributed amongst the local special hospitals, surgical aid societies, nurses' associations, convalescent homes, and dispensaries. We believe this to be a record contribution by the employees of a single great establishment to the cause of the sick.

Bad Management and Wasted Money.

WE have received a type-written circular on behalf of some hospital, the name of which is not even mentioned in the document in question. It is signed by someone whose name, though typed, is not legible, above the words "Organising Secretary." It asks for the insertion of a paragraph which has no meaning, seeing that it relates to some hospital the name of which is not given, although it contains the name of a member of the Royal Family. It is difficult enough for capable men of business to raise money for charities, but any committee which does not supervise the work of the secretariat, and permits money to be wastefully expended upon postage for the circulation of a useless document of the kind referred to, is certainly neglecting its duties. We call attention to the matter because the type-written communication is evidently one of a number which have been sent to the Press, and it indicates very clearly why some appeals receive no response. Formerly, when appeal literature produced money, it was prepared with infinite care, in an attractive form, and made a direct and personal appeal to each individual who was approached. This latest specimen of modern appeal literature is lamentable from every point of view.

Taxation of Male Servants at Hospitals.

INSTANCES have occurred from time to time where the Inland Revenue officers have sent in demands for payment of taxes on male servants employed by hospitals, with the object of assessing the charities upon the same basis as private individuals. In many cases the duty of 15s. per annum for each male servant has been paid. It should be noted, however, that the Commissioners of Inland Revenue take a very lenient view of the matter. They maintain, it is true, that strictly speaking they are entitled to the duty; but their wish is to grant an indulgence to charities whenever possible. Recently a zealous provincial officer discovered that the local hospital employed two gardeners, and promptly sent in a demand for 30s. This was resisted by the Hospital Committee, and the matter was eventually brought before the Commissioners, who on consideration declared their willingness to regard the gardeners employed by hospitals as "spade labourers," and that as such they should not be chargeable with duty.

The Parsimony of the Many.

NEARLY every week we have to call the attention of the inhabitants of some large city to the remissness of the majority in regard to hospital contributions. Cardiff has a very useful hospital which is widely popular and does good work. The hospital bed accommodation is only about one per thousand, which is less than the present needs of the community. This is proved by the circumstance that 570 patients are waiting admission and that there are only 184 hospital beds. The population of Cardiff is 180,000, yet the cost of maintaining and administering these beds and the hospital which contains them, is mainly provided by 450 ladies and gentlemen who alone subscribe annually to the funds of the Cardiff Infirmary. Lord Aberdare and the Committee have therefore a strong case when they appeal for an increased income of £3,000. Such a sum ought to be immediately forthcoming in response to the appeal now being circulated. The truth is, so many men and women have acquired the habit of taking everything from the hospitals for nothing, that they are apt to forget that they ought spontaneously to support these great medical charities in the days of health. Other cities and towns throughout the country are waking up to

their duty to the hospitals. Will Cardiff be content to slumber in health, and to take everything when ill themselves, whilst the majority of the citizens give nothing systematically to the sick poor?

Hospitals in Western Australia.

THE Report of the principal medical officer, for the year ending June 30, 1906, just issued, contains particulars of the cost of the upkeep of Government and assisted hospitals in Western Australia. Government hospitals on the coast within settled areas vary as to the cost per patient per day from 10s. 10d. at Guildford to 4s. 6d. at Bunbury. The explanation may be that only thirty-six patients were treated at the former hospital, against 385 at the latter. The north-western hospitals, of which there are six, appear to be expensively conducted. Thus, the actual cost per patient per day at Onslow was £1 13s. 6d., at Derby it was 19s. 8d., and at Wyndham 18s. 9d.; whereas at Carnarvon it only amounted to 5s. 2d. per patient. Of the assisted hospitals, that at Ravensthorpe is the most expensive, for the cost per patient per day, exclusive of buildings, was £1 16s. 11d. At Peak Hill it was £1 3s. 9d., and at Mulwarie it was £1 0s. 1d. At Leonora the cost per patient per day was only 7s. 4d., the lowest out of thirteen hospitals in this class. It is not possible to explain the dif-

to slumber, and to take everything when ill themselves, whilst the majority of the citizens give nothing systematically to the sick poor?

St. John's General Hospital, Newfoundland.

THIS hospital has laboured under considerable disability for years owing to the pressure upon its beds. After a good deal of discussion and consideration, it has been determined to reconstruct the hospital from plans prepared by Sir Aston Webb. These include an extension of the present male block, north, south, and west. There will then be four wards for men, each containing twenty-two beds, a small observation ward for male patients, and a similar one for women, with a new operation theatre situated in the centre of the new building. The scheme includes the conversion of the oldest wing of the hospital into a nurses' home and administration block. The reconstruction of the wards was commenced in the autumn and has made good progress; but the new nurses' home must be delayed until the new house, which is to constitute the residence of the principal medical officer, has been completed and is ready for occupation. Possibly in view of the extension of the hospital, the medical staff has been increased by the appointment of Dr. Macpherson, who has been placed in charge of the x-ray and light department.

THE MODERN PLAYWRIGHT AND THE MEDICAL PRACTITIONER.

"THE DOCTOR'S DILEMMA" AT THE COURT THEATRE.

MR. BERNARD SHAW's play with this title, as presented at the Court Theatre, is one which all thoughtful members of the medical profession, as well as of the public, would do well to see. The audience treated the first three acts as a huge joke; but, although the play has in it many things that are humorous, underlying the humour is a keen apprehension of much in the modern world that is going on, which, to say the least, needs reconsideration and the exercise of discipline. To the young, the ignorant, in the sense of knowledge of the world, and to the inexperienced, the play may have little serious meaning, for Mr. Shaw has the unique gift amongst modern playwrights of producing excellent dialogue, which read superficially seems smart and amusing; but for the experienced and informed it contains much which should give cause for thought. Those who have a wide knowledge of life and its meaning must be struck by the keenness of Mr. Shaw's perception, and the daring of his presentation of subjects which rest upon a basis of truth. Mr. Shaw's gifts include also keen insight into the actualities of life, and literary qualities of so high an order, that his plays are as readable, as they are interesting when presented on the stage. Underlying some things, which are scarcely true to art, we find evidence of sound principles, and the remorseless exposure of many shams. The power of terse expression, which Mr. Shaw possesses, gives a charm to most of his work. His defects, as exhibited in "The Doctor's Dilemma," seem to us to include evidence that, his phenomenal success has made him do less than justice to the perception of his

readers and audience, whilst his eye seems to be fixed too continuously on the main chance. In the play in question, he has certainly shown a disregard for truth in character, especially in his delineation of Sir Colenso Ridgeon in the last act. This last act seems to fulfil no artistic or other purpose. Its inclusion in the play is a mistake, in our view.

Mr. Shaw is at present the rage with undergraduates at the Universities, who regard him as a brilliant cynic, full of life and wit. That, however, is merely a young man's judgment, and it contains something less than justice, for it fails to recognise that Mr. Shaw as a cynic suggests, as the motto of modern life, the simple legend—

"Just as good as the real."

There is evidence in the play under consideration, that, Mr. Shaw knows and believes in the true as opposed to the false. It is for this reason that we recommend every member of the profession who has the opportunity to go to see "The Doctor's Dilemma."

The play brings out what we assume Mr. Shaw considers the weaknesses and follies of medical men, artists, and members of the Press. The playwright exhibits, from his point of view, the modern Court physician, the honoured and mature consultant of a past generation, the physician who is a scientist and the discoverer of a special toxin, and the general practitioner whose fees by the competition of hospitals and free medical relief agencies have been reduced to starvation point. Of course there is necessarily a considerable element of caricature in the presentation,

but those who know most of the profession, as it is to-day, will, we think, find matter for reflection as well as for amusement in the words Mr. Shaw has put into the mouths of his various characters. Surgery has strict limitations, and the use of the knife is a matter which requires control and restraint. The rage for operations, which afflicts numbers of people in the present day, can only be compared to the craze for tattooing, of which the savage still possesses almost a monopoly.

Sir Patrick Cullen, by his bluntness and the sound principles which underlie his words of counsel and criticism, does justice to the large body of practitioners who are also gentlemen. Those who have had the privilege of knowing the great leaders of the profession, during the last fifty years, will recall many instances in consultant practice, as they listen to the last words uttered by Sir Patrick Cullen to Mrs. Dubedat, after her husband's death.

As to the presentation of the artist, whose merits as a painter move Mr. Shaw to eloquence, he represents a type and character of man seldom met with, nowadays, amongst artists who have any claim to that title.

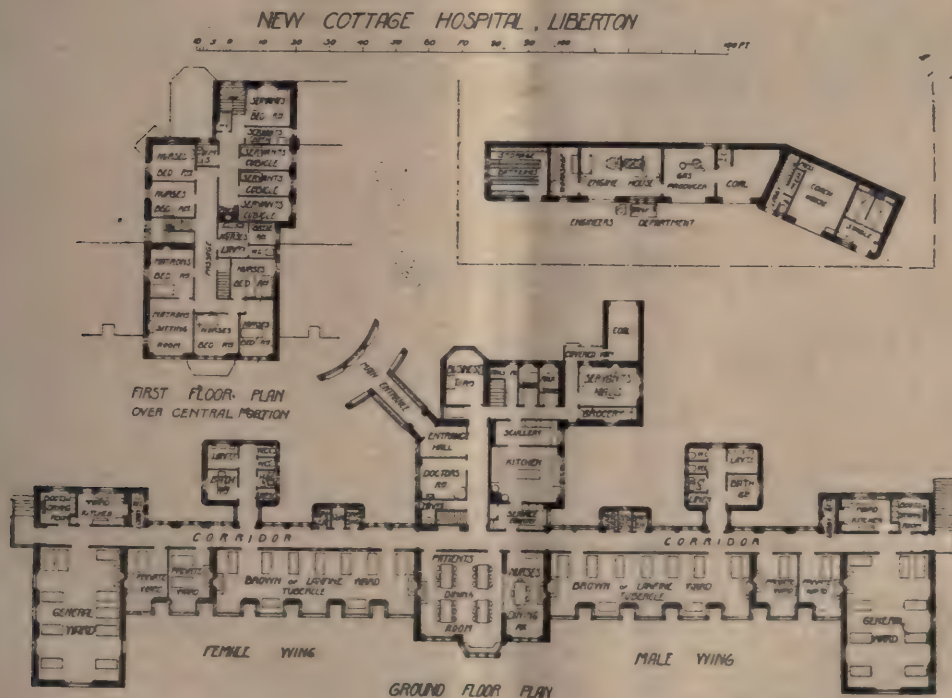
The Press representative would have to be regarded as a burlesque, if it were not unfortunately true that some editors are far too careless in their selection of men, whose chief duty it is to interview people, for the purposes of copy.

Taken as a whole, the wider the experience and knowledge of the workings of the world possessed by the student of this play, the greater will be his appreciation of much that it contains. Unless we misunderstand them, Mr. Shaw's chief doctrines aim at maintaining that virtue is the only good, that the essence of virtue is self-control, and that pleasure is evil if sought for its own sake. Certainly those who wish to take a fair view of Mr. Shaw's attitude might draw these conclusions from much that is contained in "The Doctor's Dilemma." The moral of the play seems to be that what people need nowadays is the exhibition of more intelligence and a closer adherence to principle. It is a great responsibility for a playwright to exhibit the courage and temerity which many of Mr. Shaw's plays possess. That they are able to hold the audience in close attention from the rising of the curtain to its fall, and also continuously to interest the student, who reads the plays with attention in his study, may be taken as proof of the excellence of the workmanship and the genius of the author. Whilst there are some things in "The Doctor's Dilemma" which we regret to see presented on the stage, there is much to inspire thought in the intelligent listener. For these reasons we are of opinion that, all members of the profession—and, indeed, all who have any interest in the modern play—should make it their business to see Mr. Shaw's latest work.

EDINBURGH HOSPITAL FOR INCURABLES AT LIBERTON.

THIS is really an extension of the old hospital in Salisbury Place, Edinburgh, an institution which began as far back as 1875. It then contained only twenty-two beds, and was intended for the incurably sick from any part of Scotland,

adjacent houses were added, which provided room for fourteen additional beds; but in a few years these houses were removed, and a large wing was built on the site. This addition afforded an opportunity of improving the sanitary



the only qualification being the need for constant medical attendance and skilled nursing. As might have been expected, the building was soon found to be inadequate to meet the calls made upon it; and in the year 1880 it was pulled down, giving place to a new hospital for fifty beds. In 1886, as further accommodation was required, two

arrangements, and the total accommodation was raised to 110 beds. In 1898 the west wing was added, and was devoted to the care of tubercle and cancer patients. The total number of beds was now 156.

For some years it had been evident that still further room was required; and the managers arrived at the satisfactory

conclusion that it would not be desirable to enlarge the hospital in Salisbury Place, but that a separate building should be put up beyond the city boundaries. Of course, this meant more money; and it happened very opportunely that Miss Martha Brown, of Lanfine, left to the hospital the handsome amount of £20,000, of which £6,000 was to be expended in building, and the remaining £14,000 invested for purposes of endowment. It was wisely decided to combine the two schemes, by which a much better hospital could be obtained for less money than two separate institutions would cost.

It is clear, however, that the administration of the old hospital in Edinburgh and the new one at Liberton, however carefully managed, will require more funds, although the advantages to the patients will be much greater under the new system than under the old one. The managers say that a sum of £2,000 more than the present income will be needed, and they appeal to the public of Scotland to subscribe the additional sum. It can hardly be that their appeal will be in vain.

The new hospital is situate at Liberton, near Edinburgh. The site is four acres in extent, and it slopes towards the south. This falling away of the ground entails extensive under-building; but the advantage obtained in such cases is generally well worth the outlay. The building has a frontage of about 300 feet. It faces south, and all the wards have this aspect. The centre to the south is taken up by the patients' dining-room and by the nurses' mess-room, between which are large folding doors, whereby the two rooms may be thrown into one and used for entertainments. Next the dining-rooms is the tubercle ward for nine beds. In this the window embrasures are sufficiently large to admit of a bed being placed in them, so that the patient can have open windows on three aspects. There is, however, no verandah on which the beds could be placed in favourable weather. Next this ward are two private or single-bedded rooms, having the same window arrangement as the large ward. Next to these small wards is the general ward for ten beds. This ward has three windows on one side, one at the end, and one on the side next the tubercle ward. Both wings of the hospital are alike, and at the north of all these wards runs a corridor. In the partition wall between this corridor

and the tubercle ward are several windows for cross-ventilation of the wards; and the door of the general ward also opens from the corridor. The tubercle ward would seem to have about 135 superficial feet and about 1,750 cubic feet of air space per bed, assuming a ceiling height of 13 feet; and the general ward a superficial space of 100 feet and a cubic space of 1,300 feet. These amounts strike us as being too low, especially when we look at the plan. The tubercle wards, for instance, have only one wall free to sun and air, as one end is blocked by the dining-room and the other by the private wards, although, as already said, the partition wall has openings, which will greatly increase the fresh air current. The general ward has the whole of one side and the whole of one end free; but half of the other side is blocked, and as the ward has only five windows, it follows that several beds have windows on one side only, while two beds have windows on neither side.

The great fault of the plan lies in the fact that the dining-rooms, tubercle wards, and general wards are continuous, instead of having interposed about eight or ten feet of corridor. The sanitary annexes are well placed and well designed, and they are carefully cut off from the main building.

North of the corridor and in the centre is the block containing the kitchen department, the office, the entrance hall, and the doctors' room. Over the whole extent of the centre are bedrooms and cubicles for the staff.

The wards are warmed by open fireplaces and by radiators. The floors and woodwork generally are of teak. The corridor is paved with blocks of marble. All the angles have been rounded off, and the mouldings, where there are any, are of the simplest form, so that there is not much fear of accumulation of dust.

The total number of beds in this, the Liberton Hospital, is 44, and, with the 156 in the Salisbury Place institution, makes a grand total of 200 beds. Truly a great and good work has been carried out by the managers during the last thirty years.

The architect of the new buildings was Mr. Peddie. The cost of the hospital is not stated.

It was formally opened last spring by Lord Dalkeith, in the presence of about 170 visitors.

THE WORKMEN'S COMPENSATION ACT, 1906.

BY A MEMBER OF THE BAR.

THIS Act, which comes into operation on July 1 of the present year, repeals the Workmen's Compensation Acts of 1897 and 1900, and, while re-enacting certain parts of them, very greatly extends the principle which underlies them both. The new Act consists of seventeen sections, many of them very long and complicated, and three schedules dealing with the manner of assessing the compensation and of enforcing claims, and also with the so-called "industrial" diseases, the inclusion of which forms so marked an advance on the older statutes.

Criticism of a principle which, for good or ill, is now recognised by all political parties as part and parcel of our social and economical system would be out of place; but the experience of former legislation on the same subject does not encourage hopes that the new Act will be any the less provocative of discussion and disputes as to the exact meaning and interpretation of its various sections; and the ideal of a compensation Act obnoxious to the ingenuity of neither lawyers nor insurance companies is still far to seek. The original draftsman of the Act may well plead that the innumerable amendments which are the result of prolonged debates render symmetry of form and expression impos-

sible; but, even apart from this, the application of a wholly novel legal principle to infinitely varying circumstances within limits incapable of very exact definition must, with the best intentions in the world, necessarily produce a set of rules vague and often loosely expressed, the final interpretation of which, in spite of the most exhaustive artificial definitions, must probably lie with the Courts.

One fact, however, emerges with very great clearness, and that is the necessity which will be imposed on almost every kind of employer to insure against the risks created by the Act. The exact limits of these risks cannot of course at present be accurately defined, but they are sufficiently large to prevent anyone taking the chance of finding himself outside them. The effect of the Act may be summarised as follows:—

WHO ARE LIABLE TO PAY COMPENSATION?

All "employers" of the various kinds of workmen as defined hereafter are liable. The word is used in its ordinary sense, and includes corporations and unincorporated bodies, such as partnerships and the like; executors of deceased employers or other legal representatives; and

also persons who have hired from someone else the services of any workman.

WHAT IS A WORKMAN?

Every workman as defined by the Act may claim compensation in appropriate circumstances; and it is the very wide meaning given to the term which constitutes the almost revolutionary character of the Act. The term includes:—

(a) Every person employed under a contract of service *by way of manual labour*, whatever his remuneration may be. The phrase "manual labour" has been the occasion of much litigation, and the test applied by the Courts appears to be (in the words of a learned author) "whether the manual labour is the chief duty of the servant, or only a duty incidental and subsidiary to other and more important mental ones." Thus, a shop assistant and a railway guard are not manual labourers, while a porter is. The last two cases in particular well illustrate the dividing line.

(b) Every person under a contract of service (express or implied) with an employer by way of clerical work or otherwise, whose remuneration does not exceed £250 a year. This seems so wide as to admit of practically no exceptions (save a few mentioned in the Act itself and referred to below), and to include almost everyone who works for a master. Domestic servants probably form as large a number as any other class who benefit by the section, but the importance of it also to clerks, shop assistants, and the like does not need to be pointed out; and it seems that even a curate may now claim compensation from his vicar. Hospital nurses are clearly within its scope, but a more difficult question may arise with regard to medical men, holiday appointments at hospitals, and other places whose salary does not exceed the prescribed limits; probably they are included, and it is difficult to see why the words of the Act should not be so read, although the result at first sight appears a little incongruous and perhaps ludicrous; and it must of course be remembered that, in their case, "accidents" in respect of which a claim could be made would not be common.

(c) Masters of ships and seamen who are otherwise "workmen" within the meaning of the Act. The addition of this class is a complete novelty. It does not include:—

(a) A person whose employment is of a casual nature and who is employed otherwise than for the purposes of the employers' trade or business. Perhaps a charwoman called in from time to time would be as good an example as any, or again, a person employed to clean the windows of a factory in which he does not usually work.

(b) Outworkers; who are defined in the Act as persons "to whom articles or materials are given out to be made up, cleaned, washed, altered, ornamented, finished or repaired, or adapted for sale in their own home or on other premises not under the control or management of the person who gave out the materials or articles."

(c) Members of the employer's family, dwelling in his house.

(d) Members of a police force.

(e) Persons in the military or naval service of the Crown.

WHO MAY BENEFIT BY THE COMPENSATION?

Primarily, of course, the workman himself; but if the accident has proved fatal, other considerations apply. In such a case the workman's "dependents" have a right to be compensated. "Dependents" here means "members of his family as were wholly or in part dependent upon the earnings of the workman at the time of his death." Illegitimate children and grandchildren and the parents and grandparents of an illegitimate workman are (for the first time)

included. "Members of the family" means wife, husband, father, mother, grandparents, and step-parents, children, grandchildren, step-children, brother and sister, half-brother and sister.

Dependency is a question of fact, often giving rise to very difficult problems. A son who puts his weekly wages into a common household fund has been held to have persons in part dependent on him; and the law has, in this direction (such being, in the view of the Court of Appeal, the intention of the Legislature), been usually construed as far as possible in favour of the workman.

IN RESPECT OF WHAT CLAIMS MAY BE MADE.

Compensation is payable in the event of "personal injury by accident arising out of and in the course of" the workman's employment. These words have given rise to an enormous number of cases under the former Acts. What is an "accident"? And where is the line to be drawn with respect to the words "arising out of and in the course of"? The former is said (by the House of Lords) necessarily to include the idea of something sudden, fortuitous, and unexpected, and it was for this reason that diseases contracted owing to the nature of the employment have hitherto been held not to be accidents, because it was impossible to indicate the actual moment at which they began. This is remedied in the new Act, which directs that compensation may be claimed for injury to health caused by anthrax, lead, mercury, phosphorus and arsenic poisoning, and ankylostomiasis, the Home Secretary having power to add to these from time to time. The diseases must be contracted in the course of certain scheduled processes, and certified as so contracted as directed by the Act, and the employer liable is he who last employed the workman during the twelve months previous to his disablement (which is regarded as the date of the "accident") in the employment which has caused the disease, unless such employer can prove as a fact that it was caused while the workman was employed elsewhere in the same period. Contributory negligence on the workman's part affords no defence to the employer; and even that which the Act calls "serious and wilful misconduct" is only a bar where death or serious and permanent disablement results. This has slightly extended the law, which may now press very hardly on employers. A mere breaking of the employer's rules is not serious and wilful misconduct, but a deliberate refusal to employ necessary and prescribed safeguards, as well as drunkenness, might well be so.

HOW IS THE CLAIM TO COMPENSATION ENFORCED?

First, the workman must give notice to his employer of the accident as soon as practicable and *before* the workman has voluntarily left the employment in which he was injured and (except in case of mistake, absence from England, or other reasonable cause) a delay in giving it of six months is fatal to the claim.

The whole question is then referred to an arbitrator, who is to be the County Court judge, if the parties cannot agree on one. Appeals in points of law lie from the arbitrator to the County Court judge and thence to the Court of Appeal. A schedule to the Act contains minute directions as to these arbitrations, and it is particularly to be noticed that a judge may now sit with a medical assessor.

The employer may require the workman who has given notice of an accident to be examined by a medical man chosen by the employer, and a refusal by the workman to submit to such examination suspends his claim to compensation for the time being. The employer or the workman may also demand further examinations from time to time, when the compensation has taken the form of a weekly payment, to ascertain if the health of the workman and his

capacity for work have improved or otherwise. If the report of the medical man is considered unsatisfactory by either, the matter may be referred on the application of both parties to a medical referee, whose decision shall be final. It seems possible that the necessity of a joint application for such a reference may give rise to difficulties.

HOW IS THE COMPENSATION TO BE ASSESSED?

It is to be noticed in the first place that no compensation is in any event payable unless the injury disables the workman from earning full wages at his employment for at least one week; and secondly, that if the workman is so disabled for less than two weeks, no compensation is payable in respect of the first week. This proviso is intended to prevent malingering or false claims. Before the new Act no compensation was payable for the first fortnight, but now after a fortnight it will be seen that the payment relates back to the accident itself. Clearly there will be a temptation to extend the period of incapacity over fourteen days, and the proviso in the Act admittedly gives only a rough working rule, and in fact represents a compromise arrived at during the parliamentary debates. But there seems no reason why it should not work as well as many others.

The maximum compensation in any case is £300, and is computed as follows:—When death results, dependents wholly dependent on the workman's earnings receive a sum equal to his average earnings for three years or £150, whichever is the larger, that is, up to £300. If the dependents are partially dependent, there is a proportionate deduction. If there are no dependents at all, the employer pays medical and funeral expenses with a limit of £10. Where total or partial incapacity results, the workman receives a weekly sum during the incapacity not exceeding 90 per cent. of his average weekly earnings during the preceding twelve months: unless he is under twenty-one, in which case, if his earnings are less than a pound a week, he receives not exceeding 100 per cent. of the same.

Allowance in all cases is to be made for payments or benefits which the workman may receive from the employer; and in the case of the payment of the lump sum to dependents, weekly payments previously made (before death) are to be deducted.

"Earnings" are by no means the same thing as "wages"; many other things may be taken into account, such as board and lodging, and the computation may often be one of great difficulty, the decision in all cases resting with the arbitrator.

The amount of the weekly payment may be varied by the County Court judge from time to time according to circumstances on the application of either party.

Finally, after running for six months, the weekly payment may be commuted by the employer for lump sum, cal-

culated in the manner provided by the Act. Neither this sum nor any weekly payment may be assigned, charged, or attached.

Such are the main features of the Act which (it should be observed) preserves intact all rights given to the workman by the common law or the Employers' Liability Act, 1880. These chiefly deal with questions of personal negligence on the part of the employer or his managers and the like, and are important in that no limit whatsoever is fixed to the sum which a jury may award to a successful plaintiff.

It is not to be supposed that the present is the last Compensation Act which we shall see; but its provisions should be found comprehensive enough to satisfy for some years at all events the great army of "workmen"; and perhaps it may be prophesied that the next step will rather be in the direction of compulsory insurance by all employers, a necessary complement (it would seem) to the new legislation.

DEATH OF SIR MICHAEL FOSTER.

As we go to press we are informed that Sir Michael Foster, K.C.B., late M.P. for London University, died on Tuesday in London, after a few days' illness, in his seventieth year. Born at Huntingdon on March 8, 1836, he was educated at University College, London, and in 1869 became Professor of Physiology in that medical school. Appointed Professor of Physiology in Cambridge University in 1883, he was one of the most distinguished scientists of his time, a President of the British Association, a Fellow of the Royal Society, and for twenty years its Hon. Secretary. His text-book of Physiology has been universally adopted in our great medical schools, and he has been deservedly esteemed as one of the glories of contemporary British science.

SIR EDWARD SASSOON is to preside at a banquet in aid of St. John's Hospital for Diseases of the Skin at the Savoy Hotel on Friday, May 10.

Administrative Appointments.

CITY OF CARDIFF MENTAL HOSPITAL.

The Visiting Committee require an experienced STOREKEEPER. Annual Salary £135, and Dinner provided.

Must be between 30 and 45 years of age.

Applications, stating past experience, accompanied by copies of not more than three testimonials (which cannot be returned), to be delivered at my Office, addressed to me, and endorsed "Mental Hospital Storekeeper," not later than SATURDAY, February 9th, 1907.

Canvassing, direct or indirect, will disqualify.

J. L. WHEATLEY.

Town Clerk.
(1144)

City Hall, Cardiff.

THE BEST NATURAL APERIENT WATER.

Hunyadi János

For CONSTIPATION.

Professor D. LAMBL, of Warsaw, Professor of Clinical Medicine at the University, writes—

"Hunyadi János Bitter Water, besides being an excellent general aperient, has proved specially efficacious in the treatment of chronic constipation, venous obstruction and congestion, hæmorrhoids and obesity.

AVERAGE DOSE.—A wineglassful before breakfast, either pure or diluted with a similar quantity of hot or cold water.

CAUTION.—Note the name "Hunyadi János," the signature of the Proprietor, ANDREAS SAXLEHNER, and the Medallion, on the Red Centre Part of the Label.

The Hospital

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SATURDAY, FEBRUARY 9, 1907.

HUMAN AND ANIMAL TUBERCULOSIS.

THE study of tuberculosis during the last quarter of a century has produced dramatic surprises not a few, and among such unexpected developments must certainly be ranked Professor Koch's statement, made in 1900, that human and bovine tuberculosis were two distinct and separate diseases. Previous to that announcement it had been taken for granted that tubercle, wherever found, was one and the same disease, the result of one and the same bacillus, which might, so it was assumed, be readily transferred from the lower animals to man, or *vice versa*. Koch's view was received with general suspicion, or even with more definite hostility, both by the medical and veterinary professions. On the other hand, it was naturally welcomed by those financially interested in the public supply of meat and milk, for it suggested that certain restrictions on the sale of these articles were no longer necessary, the bacillus of bovine tuberculosis being, according to the new doctrine, incapable of infecting the human body. It soon became generally recognised that a large public issue was thus involved, and that an authoritative attempt must be made to settle the question. In response to this a Royal Commission was appointed, and this body has since been engaged in an extensive series of experimental investigations which have been conducted on farms generously placed at the disposal of the Commission by Sir James Blyth. In 1904 the Commission issued a first interim report, in which it was announced that the experimental work of the Commission showed that human tuberculosis could be communicated to bovine animals, and that generally, Koch's assumptions had little or no foundation, and could not safely be made the basis for conduct or legislation.

The Commission has now issued a second interim report, and in this the conclusions stated in the first report are confirmed and the results of further experimental work are presented. First may be noted the broad result of introducing into the bodies of animals of various natural orders tuberculous material taken in one group from cattle, and in another from human beings. When comparing these two series of cases the Commissioners record rapidly fatal results in all the animals injected, excepting only rats and mice, and state that the effects produced were the same both in kind

and degree whether the material employed was taken from the bodies of tuberculous human beings or from tuberculous bovine animals. This is emphatic and definite enough, and it will be difficult any longer to obtain a hearing for the proposition that human and bovine tuberculosis are distinct diseases, and that one cannot possibly give rise to the other.

A further comparison is instituted between the two series of cases above referred to in reference to the microscopical and cultural characteristics of the respective bacilli. And here the Commissioners are equally confident. They deny that any differences between the bacilli in the two groups can be recognised, and, further, they contend that the disease, as seen in the human bodies examined, not only had all the features of bovine tuberculosis, but that the bacilli giving rise to the disease actually came from a bovine animal. "There can be no doubt," says the Report, "but that in a certain number of cases the tuberculosis occurring in the human subject, especially in children, is the direct result of the introduction into the human body of the bacillus of bovine tuberculosis." In equally decisive tones it is concluded that the bacillus is introduced through the agency of cow's milk, which, as a medium for the bacilli, is held to be responsible "for a considerable amount of disease and loss of life, especially among the young."

The immediately practical outcome of the work of the Commission needs no moral to enforce it. The effective supervision of dairy farms is a demand which can no longer be resisted, and this is the more necessary seeing that the clinical detection of tuberculosis in the cow is a much more certain task than the detection of the bacilli in the milk. It is at the source of supply that the evil must be suppressed. If this is recognised and enforced the public value of the Commission will need no further justification. There is, however, still much work to be done. In particular, it is obvious from the observations already made, that whilst the bacillus and the effects it produces are, each alike, identical in human and bovine tuberculosis, there are certain conditions and circumstances which modify the virulence of the bacilli.

The work in this direction is to be continued, and as it manifestly has therapeutic possibilities, it will command the special interest of the medical pro-

fession. The Commission has already accomplished much, and its further work will be followed with confidence and expectation.

THE DULL OR BACKWARD CHILD.

WHEN rival theologians have at last settled what religious dogmas are to be taught to children, when public opinion has realised that education is concerned not only with the mind or even the soul, but also with the body, and when, in consequence, medical inspection of school children has become a routine practice, then, and not until then, the dull or backward child will come by his own, and will receive the attention which he deserves; this in most cases he will fully repay. At present, such a child is forced to attend a school where he is liable, either to be altogether neglected, or to have his life rendered a burden to him, and where he exhausts alike the time and the patience of his teachers and is a drag on the progress of his more intelligent fellow-scholars. Yet all these evils may be, and in fact usually are, the results of some readily remediable cause.

First of all, however, it is important to distinguish between the child who is merely dull or backward, and the one who has definite mental deficiency, for parents are usually extremely loath to admit even a suspicion of imbecility in their children, and sometimes speak of those who are obviously not far removed from idiocy as simply "backward." In the words of Dr. Charles West: "A mentally deficient child would be abnormal for any age, whereas a backward child is merely abnormal for its own age." The mentally deficient child has some definite brain lesion, sometimes gross, sometimes incapable of clinical definition, and his condition is essentially incurable, although education on special lines may enable him to become "a hewer of wood and a drawer of water." Mere dullness, on the other hand, is due usually to some disorder of other parts of the body or of the general nutrition, with, as a result, an imperfectly nourished brain.

To what causes, then, may dullness be due? First of all, to under-feeding, the deficiency being perhaps quite as often in the quality as in the quantity of the food. It is true that starvation acting on a nervous temperament may produce a sort of acute precocious cleverness; but in the long run, the nutrition of the brain in such circumstances must suffer, and so its receptive powers be diminished. It is the merest truism to say that it is useless to try to teach a half-starved child. This is far from being a question simply of the poverty or vice of the parents. If the art of cooking, the art of making a tasty, and at the same time nourishing, meal out

of apparently unpromising materials, were only half as well understood in this country as it is in France, a vast amount of under-feeding would at once disappear. Then there are always a number of children attending school who are suffering from definite chronic illness—children with heart-disease—congenital or acquired—anaemia, tuberculous disease in its early stages, and so on. The parents may be profoundly ignorant, or perhaps utterly careless, the teachers often unable to distinguish between moral perversity or sheer idleness and the apathy of physical weakness or disease, and so these unfortunate children may drag wearily on at school for a long time before the true cause of their mental condition is discovered.

Yet another, and often quite unsuspected, reason for mental dullness is slight chorea. In the majority of cases the characteristic movements are at first but slight, and therefore easy to interpret wrongly; and there are some patients in whom, throughout the disease, the movements are comparatively unobtrusive. Such children are apt to get into trouble, not only for making grimaces and for dropping things, but also for inattention or indifference at their lessons. Marked jerky movements are apt to be regarded by non-medical observers as the essential feature of chorea, whereas, as a matter of fact, loss of muscular power and mental weakness are always present to some extent, and either one or the other may be the predominating symptom. In some instances an altered mental condition may be a very prominent and a very misleading symptom, and even in the mildest cases of chorea the child is unable to concentrate his attention on any subject for more than a very short time.

Finally, and in many respects most important of all as a cause of chronic dullness, are adenoid growths in the naso-pharynx. They are well known to lead often to deafness, and this necessarily makes a child appear dull and stupid; but, in addition, they interfere with the air entry into the lungs, and so qualify the aëration of the blood; consequently the child's brain is supplied with blood which is poorly oxygenated, and hence its functions are imperfectly performed. Hundreds, perhaps thousands, of school children in this country suffer in this way, and yet the real cause of their slow progress, both mental and physical, is never suspected until possibly irremediable mischief has been done. Now all these causes of mental dullness could be detected, and most of them completely removed, under efficient medical inspection. Can there be any stronger argument to indicate the urgent need for the speedy enforcement of this measure, with its almost untold possibilities of benefit to the rising generation?

ANNOTATIONS.

The Late Sir Michael Foster.

THE death of Sir Michael Foster will be generally recognised as a severe loss to the position and influence of science considered as a factor in the development of national life and welfare. If the lapse of time and other influences had removed him, at least in his special sphere, from the ranks of those engaged in original research, he still remained, even though no longer a teacher in the technical sense of that term, one of the most energetic and consistent preachers of the claims of science, and of the need for the recognition of these in the efficient organisation of national life. Only a few days prior to his death, when speaking at the Mansion House in support of the British Science Guild, he was enforcing this essential doctrine, and was saying "science is not for men of science alone." In this direction in particular, the loss of his interest and influence will be severely felt. For, however it is to be explained, a large section of the British public—and the governing classes contribute largely in this direction—cultivates a distrust or even an active dislike of science and its defenders. An incident towards the close of Sir Michael Foster's own career illustrates this statement. As most people know, Foster taught physiology at Cambridge for some thirty years, and his reputation and influence were among the proudest boasts of the medical school of the University. Yet when, on his retiral in 1903, an attempt was made to recognise his great services by the grant of a pension and by a proposal to elect him to an extraordinary professorship, both suggestions excited a most active and energetic opposition. His long record as a scientific worker and the charm of his literary style have made him familiarly known to many who never saw his face, whilst his grateful pupils are to be found in all lands. To the last he was keenly interested in the work of the Royal Commission on Tuberculosis, of which he was appointed Chairman in 1901.

Angioneurosis.

VASOMOTOR symptoms arising from a morbid condition of the sympathetic system are of a somewhat indefinite and very varying nature; they have, consequently, often suffered neglect at the hands of clinical teachers. Many of these manifestations are rather indications of an instability of the sympathetic system than of any actual morbid condition. Nevertheless it is well that we should have clear ideas on these neuroses, and Dr. Thomas D. Savill has filled a gap in our system by defining these conditions and their special features. He points out that these vasomotor symptoms of angioneurosis present four special clinical characteristics. They are paroxysmal; they are more common in women than in men, and especially in emotional women; they tend to recur in some form or another throughout life, and when localised they tend to be bilateral and symmetrical. Among these vasomotor disturbances Dr. Savill would place nervous faintings, flush-storms and ischæmic storms, often followed by the

passage of large quantities of pale, watery urine, which he ascribes to a sudden dilation of the splanchnic vessels. Circulatory disturbances, such as palpitation and rapid pulse, and pulmonary disturbances, including asthma, also belong to the same category, and he suggests that migraine and even epilepsy may have a vasomotor origin. Many skin eruptions are of a vasomotor nature, and it is especially necessary that these should be carefully distinguished and diagnosed for purposes of treatment. The sovereign remedy for all these conditions indicating an irritability of the reflex centres is bromine. Other remedies are also indicated, according as the symptoms point to a condition of angiospasm or vascular dilatation.

Effect of a Meat Diet on Animals.

SOME very interesting investigations are being conducted in the physiological laboratory of the University of Edinburgh with a view to ascertain the effects of a meat diet on animals and their progeny, and Dr. D. Chalmers Watson recently read a paper before the Pathological Society on the results so far obtained. The objects of these researches were to ascertain what organs, if any, are specially stimulated by a meat diet; to throw light upon doubtful questions of dietetic treatment, and to determine whether an increase in the consumption of meat food is in any way connected with the increasing incidence of certain diseases. Rats were used, and sets of controls were fed on bread and milk. Rats fed exclusively on meat showed marked retardation of growth, and their reproductive powers were diminished. The second generation of meat-fed rats gave a high mortality. The meat diet, when commenced at the age of two to four months, was prejudicial to the occurrence of pregnancy, and also to lactation, owing to the smaller development of mammary tissue. The thyroid glands showed in the majority of cases marked changes, suggesting that the activity of the gland was at first stimulated by the diet and later exhausted. The kidneys also showed changes due to excessive strain on their power of excretion. As pointed out by Dr. E. I. Spriggs and Dr. Hale White, some of the phenomena observed might be due rather to the absence of certain necessary food constituents, such as calcium salts, from the meat diet, than to any direct pernicious effect of the meat itself, and it is to be hoped that by making certain variations in the diet in the further investigations which we understand are still in progress, Dr. Chalmers Watson may be able to draw more definite conclusions as to the actual influence of the meat *per se* on the animals. The physician is still very much in the dark as to the effects of the different foodstuffs on the metabolic processes of the body, especially in the many morbid conditions of a chronic nature which he is called upon to treat. Any investigations, therefore, which are likely to throw light on these questions are of great interest and importance; but it must always be borne in mind that it is not justifiable to draw inferences in regard to man directly from such experiments upon animals.

MEDICAL OPINION AND MOVEMENT.

THE death of Sir Michael Foster took place suddenly on Tuesday night. Only the previous Saturday he was working in the laboratories at the Stansted farm of the Royal Commission on Tuberculosis, of which he was chairman, and on the previous Monday he was speaking at the annual meeting of the British Science Guild at the Mansion House. He studied medicine at University College, where afterwards he became teacher and then Professor of Physiology. Prior to this he was for a few years in general practice at Huntingdon. As Professor of Physiology at Cambridge he took a large share in the development of the Cambridge Biological School. His contributions to original research were not very great, but he exercised a profound influence as a teacher, both by his lectures and by his writings. He founded the *Journal of Physiology*, and his "Text-book of Physiology" is renowned as much for the charm and beauty of the style as for the exhaustive treatment of the subject. He was elected a Fellow of the Royal Society in 1872, and was created K.C.B. in 1899. In 1900 he represented the London University in the House of Commons as a Liberal Unionist, but later he became Liberal, and he lost his seat to Sir Philip Magnus at the last general election.

UROTROPIN has now enjoyed the favour of the profession for some years as an antiseptic drug for the urinary tract. It seems likely that it will now give place to the more complex chemical product called hetralin. Hetralin is a combination of resorcin and urotropin, and is represented by the chemical formula $C_6H_{11}N_4C_2H_3O_3$. It depends for its antiseptic power, like urotropin, upon the liberation of formaldehyde in solution. This separation of formaldehyde takes place much more readily from hetralin than from urotropin, and can only be prevented by a reduction of the temperature to below 0° C. On the other hand, it is promoted by warmth and by acids. The resorcin component of the drug raises the acidity of the urine, and consequently assists the liberation of formaldehyde in alkaline or neutral urine. According to Wilhelm Fries, who has thoroughly investigated the subject, formaldehyde appears in the urine ten minutes after the administration of hetralin by the mouth, and can be detected for several days afterwards, varying according to the amount of the dose. The antiseptic power of hetralin has been shown to be considerable, at least *in vitro*. It is more powerful in acid than alkaline media, but even in the latter it is said to be much more efficacious than urotropin.

A CASE of considerable interest to the medical profession has recently been decided by Mr. Justice Warrington in a way which will doubtless be a matter of surprise to many. The parties to the suit, Clifford v. Timms, were dentists in partnership, but the questions involved might equally well arise between medical men. The plaintiff was summoned before the General Medical Council for employing unregistered assistants and publishing pamphlets

of an objectionable character, and he was found "guilty of infamous or disgraceful conduct in a professional respect," and his name was directed to be erased from the Dentists' Register. In accordance with a clause in the deed of partnership, the defendant gave notice to determine the partnership. This clause provided that if either partner should be guilty of professional misconduct, or of any act which was calculated to bring discredit upon or injure the other partner or the partnership business, the other might by notice determine the partnership. The plaintiff brought an action on the ground that the notice was invalid. Mr. Justice Warrington found for the plaintiff. He held the opinion that the decision of the General Medical Council was not binding on him, and on the evidence before him he formed the conclusion that the plaintiff was not guilty of professional misconduct. There can be little doubt that the usual insertion of such a clause in partnership deeds is intended to cover any such decision of the General Medical Council. Nothing could more discredit or injure a partnership than the removal of the name of one of the partners from the register. In view, therefore, of the possibility of a court of law overriding a decision of the General Medical Council, all partnership deeds should contain a clause definitely making such removal a ground for the determination of a partnership.

In discussing measures for reducing the high mortality of infants, also for staying the ravages of tuberculosis, we have frequently laid stress on the importance of attempts to educate the people in the fundamental principles of the rearing and feeding of infants, and to give them some practical knowledge of the prevention and treatment of consumption and other infectious diseases. The Education Department of the London County Council is doing something on these lines by evening classes in "First Aid," "Home Nursing," "Infant Care," and "Health." We have on a previous occasion referred to the work of the Marylebone Health Society. This Society was formed a year ago to aid working mothers of the borough in the care and management of their infants, and to spread elementary knowledge of the prevention of consumption. The Society has arranged its third course of special lectures, which are to be given every Friday during this and the following month at 5 P.M., at 77 Welbeck Street. Subjects chosen include: "The Importance of Mastication," "The School Child," and "Some Points in Infectious Fevers," and the Society has secured for these lectures the services of such eminent men as Dr. Harry Campbell, Dr. B. L. Abrahams, and Dr. Sydney Phillips. The Honorary Secretary of the Lectures Committee is Miss Prince, of 22 Upper Wimpole Street, W. We feel sure that these educational endeavours are on the right lines. Hence we hope that they may meet with the success they deserve, and may stimulate like efforts in other districts.

HOSPITAL CLINICS.

THE TREATMENT OF FRACTURES.

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(Abstract of Clinical Lectures specially reported for THE HOSPITAL.)

THE treatment of fractures of long bones is important by reason of its difficulty, and of its seriousness to the patient. Disability may be due to mal-union, to non-union, or to stiffness of joints, tendons, and muscles in the neighbourhood of the broken bone. Deformity may be produced by the force that caused the fracture, and may be kept up and aggravated by muscular contraction and by the weight of the limb below the broken ends. The cases where muscular action is of primary importance are those where separation of the fragments tends to occur. The trouble in all these cases of deformity is primarily due to imperfect reduction of the fractured ends and insufficient retention of the fragments in position.

Inability to use the limb may be due to mal-union of the fragments, especially where the fracture is in the vicinity of a joint; but it is chiefly caused by adhesions of the tendons and muscles to their sheaths, or to each other, or to the bones at the seat of fracture. It may also be caused by adhesions in the neighbouring joints, atrophy of the muscles, etc. These troubles are all essentially due to the prolonged fixation of the injured parts, for it must be borne in mind that in a fracture the lesion is not confined to the bone itself, but also affects the soft tissues, the result being that blood and lymph are poured out into the soft tissues, and if they are not removed by movement and massage, they lead to development of fibrous tissue, which tends to bind the various parts together. Unless the broken ends are brought into accurate apposition at the time of the injury, or soon after, they will never come right subsequently, and a perfect result cannot be obtained; if, on the other hand, they are properly brought together at the time, it is in most cases comparatively easy to keep them in good position, and thus to prevent many of the bad after-results. In my opinion, the first and most important point to be considered in the treatment of recent fractures is whether, and in what way, the fractured ends of the bones can be brought into accurate apposition. It must be borne in mind that if such replacement is not carried out in the first instance no amount of extension of the limb afterwards, and no possible arrangement of splints and apparatus, will bring the bones into proper apposition.

By reduction of a fracture I mean an attempt to interlock the broken ends. The ends of the bones are never broken off smoothly; there are always projecting portions on both surfaces, and if only these can be fitted into each other the ends will frequently retain their position to a considerable and sufficient extent without much trouble or pressure. No doubt it is often a very difficult matter to obtain really accurate

interlocking of the broken ends, owing to the obliquity of the surfaces and their tendency to slip apart, and also because the swelling of the soft parts around, and the depth at which the bone lies, prevent the surgeon from accurately feeling what he is about. Indeed, accurate apposition is in a good many cases impossible without an operation; and although such apposition is the thing to be aimed at, the question naturally arises in cases where it is evidently not possible to carry it out, whether it is in the particular instance essential. This depends very much on the nature of the fracture. Where a fracture extends into a joint, or is in the immediate vicinity of a joint, no pains should be spared to get accurate replacement of the fragments, otherwise there will subsequently be a great deal of restriction of movement in the joint, and often complete stiffness, owing to the altered lines of the joint surfaces. This applies more especially to fractures above the elbow joint, and also about the knee, ankle, and wrist. In fractures of the shaft of the long bones exact accuracy of apposition is not necessarily of such importance; fractures of the leg, more especially, often give a perfect functional result, even although the bones are not accurately in apposition. In fractures of the shaft of the femur, on the other hand, such apposition is important, because if the ends overlap, shortening, often to a marked degree, is very apt to occur.

Muscular contraction forms an obstacle to reduction. If overlapping of the fragments has once occurred, the contraction of the muscles, which is increased and kept up by the irritation of the broken ends, not only increases the deformity, but is very difficult to overcome when we attempt to reduce the fracture. In other cases, for example in fractures of the patella and olecranon, the muscular contraction causes separation of the fragments, and prevents them from being afterwards kept together.

Interposition of material, such as periosteum, between the broken ends renders the proper reduction of the fracture very difficult and sometimes impossible, but unless it is rectified non-union is very apt to occur.

Rotation of the fragments is also a great obstacle to accurate reduction. Dr. Griffiths, of Cambridge, has shown that most fractures are spiral, and not simply transverse or oblique, and the result is that as the force continues to act after the bone is broken, the spiral movement is continued, and not only does the lower fragment overlap the other, but it is rotated to a very serious extent. If, now, in reducing the fracture, attention be not paid to this point, the broken surfaces will not come properly into apposition and there will be no possibility of interlocking the ends; consequently, as soon as the extension is released, the muscles come into play and the overlapping recurs. This is a most important

fact to bear in mind, especially in oblique fractures, for if some degree of interlocking is not obtained at the time, shortening of the limb will inevitably occur, as no amount of extension will bring or keep the lower fragment in position against the pull of the muscles.

Comminution of the broken ends is also another cause of difficulty in the proper setting of fractures; instead of having simply two surfaces which can be interlocked sufficiently to retain their position without much effort, one or other surface may be so irregular that no proper approximation is possible; and besides, some of the fragments may get in between the ends of the bones and prevent proper reposition.

The small size of one of the fragments is another obstacle to the proper reduction of a fracture. This, of course, is especially the case where the fracture is in the immediate neighbourhood of a joint, and where the one fragment is so small that one cannot grasp it properly and get the two ends in apposition, and yet in these particular cases it is most important to do so. Further, in such fractures, the difficulty is increased by the fact that usually there is a large amount of swelling present, which prevents one feeling and getting a hold of the small fragment.

The chief difficulties in retaining the fractured ends in position afterwards are:—

1. *Incomplete reduction* of the broken ends is the main cause of difficulty, but in some cases a better result may not be possible, at least by manipulation, while in others, even after proper reduction, the fractured ends are very apt subsequently to slip out of position. For example, in the case of oblique fractures, the broken surfaces are often comparatively smooth, and the interlocking of the ends, even when they are brought accurately together, is imperfect; so that often, in spite of careful reduction, displacement may occur during the application of the apparatus; and if this takes place it will frequently be found that in a short time, owing to the muscular action, marked overlapping of the fragments has occurred.

2. *The weight of the lower part* of the limb, unless carefully guarded against in putting up the fracture, will produce bending, and in the case of oblique fractures, unlocking of the fragments with subsequent overlapping of the ends. For instance, in cases of fracture of the tibia, the foot, unless properly supported, is apt to fall back and lead to a bending at the seat of fracture; or, in cases of fracture of the shaft of the femur, the weight of the distal part of the limb is very apt to produce rotation outwards.

3. *Where one fragment is short* and has a strong muscle attached to it, it is very apt to be tilted and rotated out of position unless attention is paid to bringing the longer fragments into line with it. The best examples of this trouble are fractures below the lesser trochanter of the femur, and fractures near the upper end of the radius.

HOW TO REDUCE A FRACTURE.

In the first place, before commencing the necessary manipulation, it is essential to have all the retentive arrangements fully prepared, so that they

may be applied at once when the parts have been brought into proper line. To pull a limb about, and then to allow the displacement to recur while the retentive apparatus is being got ready, is only to lacerate the parts twice without any corresponding advantage.

In the great majority of fractures, reduction should be effected under an anæsthetic. Complete relaxation of the muscles is a very important point, otherwise they form a formidable obstacle to reduction, and the necessary manipulations increase their contraction and thus render the accurate reduction of the fracture very difficult, or perhaps impossible. Assistance is also necessary wherever it can be obtained, the duty of the assistant being to make the necessary extension on the distal fragment, which must be done steadily and not in jerks; to see that the extension is being carried out in the proper direction; and, more especially, to see that the position of the limb as regards rotation is correct. The body must also be fixed, and, wherever it is possible, a second assistant (who need not, however, be a skilled one) should be obtained for this purpose; the important point being that the surgeon should have both hands free to manipulate the fragments into position. Proper extension and counter-extension having been obtained, the surgeon proceeds to *manipulate* the fragments and to try to interlock them as accurately as possible.

In the first place, he has to see that nothing intervenes between the broken ends. This he judges of by the completeness of the crepitus, taking care, however, in testing this that he does not grind the surfaces together, and so break off any irregularities which will be of use in the way of interlocking the ends. Having made sure of this point, he tries to get the ends into accurate position by rotation and lateral movements, while steady extension is being carried out by the assistant. Theoretically this sounds simple, practically it is not at all easy. To feel the bones and to make sure that they are really in position is especially difficult in a fleshy part like the thigh. Hence, wherever it is possible, it is well to perform the reduction under the x-ray screen, so that the surgeon can see as well as feel whether the bones are in proper apposition; and this is especially important in cases of fractures about joints, where accuracy is very necessary. It is not, of course, by any means possible to carry this out in all cases, partly on account of the absence of the necessary apparatus, and partly on account of the expense; and, unless the matter is a very important one, the surgeon cannot leave the patient in pain while the apparatus is being obtained and fitted up. In any case, however, it is important to have x-ray photographs taken as soon as possible after the fracture has been put up, and these skiagrams should always be stereoscopic. This should be done while the injured parts are still soft, so that if any alteration in position seems necessary, it can still be carried out. If it is left for a week or two the tissues by that time have become so rigid and fixed that no proper rectification is possible without an open operation.

The question of operation for reduction. Should it be found impossible for some reason

or other to get the bones into accurate apposition, the question as to what should be done must be at once considered, that is to say, one must decide whether to be content with the best position obtainable by manipulation, or whether further steps should be taken to secure a more perfect result. This raises the question of operation on recent fractures, for under these circumstances the difficulty cannot as a rule be overcome in any other way. In considering this question, two points must be borne in mind; in the first place, operations of this kind are of a severe and serious nature. The severity may be considerable, especially in the case of deep-seated bones, for in such circumstances an extensive incision must as a rule be employed in order to gain good access to the parts, and this involves considerable loss of blood, as well as a more or less prolonged operation, before the ends of the bones are satisfactorily fixed. The seriousness arises from the risk of sepsis, for if suppuration occurs in the wound disaster is very likely to follow; the various general septic diseases may set in, there may be necrosis of the ends of the bones, prolonged suppuration, and so on. Hence, unless the operator is certain of his aseptic work, he should not operate in cases of recent fracture. In the second place, even supposing that the surgeon is sure as regards asepsis, it must be remembered that some of the methods of fixation employed in these cases are not very satisfactory; and it is especially essential that the fixation should be firm, because after these operations there is always a good deal of bloody oozing, sometimes necessitating several changes of dressings before the wound has healed. This implies a good deal of movement, with the risk of displacement unless the parts are firmly fixed, and the assistance therefore of one or more individuals at each dressing. Thus, in deciding the question of operation, one has to consider the severity of the operation, the risk of sepsis, the firmness of the fixation, and whether the necessary assistance in the subsequent dressings is likely to be forthcoming. On the other hand, absolute apposition of the fragments is by no means always necessary for a satisfactory functional result; and a little overlapping of the fragments, which may look very bad in a skiagram, may not affect the functional result at all.

Hence a good deal of judgment must be exercised in deciding the question of open operation in cases of recent fracture, and before undertaking it the surgeon must be satisfied that if it is not done the functional result will be bad; that by the operation he can distinctly improve matters, and that it can be performed with safety. In regard to this question of operation, if it is to be done it should be within three or four days of the accident, otherwise the tissues become so infiltrated and firm that it is extremely difficult to get the ends of the bones into position, and more extensive incisions than are altogether desirable may be necessary to effect this object. In certain cases it is most desirable, where possible, to operate. Such are injuries where the fragments become separated by muscular action, and where soft tissues get in between the ends of the bones; such as fractures of the patella and ole-

cranon. In fractures involving joints, with displacement of fragments, operation is also very necessary. This is more especially the case in fractures about the elbow-joint, particularly when the lower end of the humerus is broken up into two or more pieces. Other examples are fractures through, or just above, the condyles of the femur, if it be found impossible otherwise to get or retain the fragments in position. T-shaped fractures into joints almost always require operation. Fractures of the tibia where the lower end of the upper fragment tends to tilt forward and perforate the skin, or conversely, where it is found impossible to keep the heel forwards satisfactorily, should be fixed by operation. Where pieces are broken off from bones, as in fracture of the great trochanter of the femur, or of the great tuberosity of the humerus, operation may also be necessary to fix them in position.

More difficult is the question of operation on deep-seated bones such as the femur, and on double bones, such as the bones of the forearm. Operations on the shaft of the femur are difficult and extensive on account of the depth of the bone, the large incision required, and the risk of sepsis if great care is not taken. On the other hand, such fractures are often oblique and the fragments difficult to interlock in the first instance and to retain in position afterwards; thus marked overlapping of the fragments with consequent shortening is very apt to occur even in spite of the use of as great a degree of extension as can be borne. There are, no doubt, many cases of fracture of the femur where the results are not satisfactory, especially from the point of view of shortening. Hence it seems to me that the proper plan in these and similar fractures is to watch the case very carefully, to take frequent measurements and skiagrams, and if in a few days it is evident that the result is not likely to be satisfactory, to cut down before the parts have become so matted together that they will not stretch. The question of the forearm is also a difficult one. The proper fixation of the two bones by operation is by no means an easy matter; while, on the other hand, the fracture can be seen very readily and the ends of the bone brought into position under the x-rays. Here, again, a good deal will depend on the progress of the case, and except in rare instances I should not advocate operation in the first instance.

Much depends on the manner of fixation employed. Except for the patella and olecranon, wires are of little use, and the means I employ are plates, screws, and pegs. In such cases as detachment of the tuberosity of the humerus, screws or pegs, preferably the former (ordinary unplated steel screws), are the best. About the elbow, small metal or ivory pegs or nails are most frequently useful. But wherever the parts are large enough to permit of it, I use an aluminium plate embracing the two fragments and fastened on with tacks or small screws. The aluminium plates which I employ are pieces of sheet aluminium which can be readily bent but are not too thin, and are perforated with a number of small holes. The fractured ends having been laid bare on one side for at least an inch above and below the line of fracture, a piece of

aluminium is cut and folded about one-third of the way round the bone, so as to project about an inch (or longer, if possible) above and below the fracture. The plate need not surround the bone to a greater extent, as long as it is well curved and securely nailed on. In most bones, unless they are very dense, ordinary tin-tacks or thin nails can be driven in and will hold the plates; in dense bones, and also if the plate is employed for old, mal-united fractures, the tin-tacks will not penetrate the dense bone, and it will be necessary to bore holes and put in small screws. Once the plate is securely fixed one can handle the limb readily without any fear of displacement; the wound is stitched up without any drainage tube, and in the great majority of cases the plate gives no further trouble. I have used this method in a considerable number of cases where bones have either been divided intentionally or accidentally, and am extremely satisfied with the firm fixation thus obtained; but, of course, in certain parts—such as the condyles of the humerus—the plate is not suitable, and one must be content with pegs or nails. In cases of fracture of two bones I have now on two or three occasions—for example, in the case of the fibula—where there has been an oblique fracture and a long splinter running down, pushed the long splinter into the medulla of the other fragment, and in this way obtained absolute steadiness and perfect union without any sign of the line of fracture subsequently; and I think this method is well worth bearing in mind, and might be extended with advantage in a considerable number of cases.

Having effected the reduction of the fracture, either with or without operation, suitable retentive apparatus must be applied. This varies, of course, for each fracture, but the guiding principle is the following: The splints are meant to retain the fractured ends of the bones in their proper position

after these have been reduced and correctly fixed. They are not supposed to rectify an imperfectly corrected displacement by constantly forcing or pulling the bones into position. Thus is a very important point. If the fractured ends have been more or less satisfactorily interlocked, very little pressure is required to keep them in position, and consequently a splint may be put on so as to be comfortable to the patient and without any special pressure being applied; that is to say, the splints are used to keep the bones in line and prevent the displacement from mechanical causes, rather than to keep them forcibly in apposition and violently oppose muscular contraction.

The question of massage in the after-treatment of fractures has been much discussed, and more or less general agreement has been come to. It is quite evident that the sooner movements and massage can be begun, the quicker will the function of the limb be restored, so long as no displacement of the bones occurs during the manipulations. My own belief is that the fractured ends ought to be left quite still for eight or ten days after the injury, except in the case of fractures of the forearm, where the fingers can be left out of the splints and moved from the first. By that time the bones will be more or less stuck together with fairly firm material, so that a certain amount of force would be necessary to displace them; and from that time onwards the splints may be taken off once or twice a day, and massage and careful active and passive movements of the neighbouring joints and muscles carried out so as to prevent the occurrence of stiffness. In most cases, provided the patient does not put any strain on the part, the splints may be left off entirely in from three to four weeks. I do not approve of treating fractures without any splints, or of looking on massage as of primary importance, and reduction and retention as of quite minor value.

THE ELECTRICAL CONDUCTIVITY OF THE BLOOD AND URINE.

DR. DAWSON TURNER recently communicated to the Medico-Chirurgical Society of Edinburgh the results of a research on the electrical conductivity of the blood and urine in health and in disease and as a test of the functional efficiency of the kidney. The resistance of the urine was estimated in the usual manner by means of a U-tube. In health the resistance was low (about 250 ohms), being less as the proportion of salts present in the urine is higher—i.e. the more efficient the excretion by the kidney. In disease the electrical resistance of the urine was usually increased, but the cause of this increase was not always easily accounted for; thus in pneumonia, the high resistance obtained is due to the absence of chlorides; but in diabetes it does not depend on the presence of sugar, as artificial solutions of glucose of corresponding strength do not present a correspondingly high resistance.

The estimation of the resistance of the blood presented many difficulties, owing to the small quantities available; but by the use of an ingenious application of a micrometer screw with a bridge contact, Dr. Turner could obtain the resistance in quantities as small as five cubic millimetres. The

normal resistance of the blood is high (about 900 ohms), the conductivity being impeded by the corpuscles; and any alteration in the number of these influences the resistance. The most marked alteration in disease is observed in pernicious anæmia, where the resistance falls in proportion to the blood-count.

Dr. Turner has recently combined the observed resistances of the blood and urine in the same patient in the form of a fraction by dividing the former by the latter, which gives a value in health of three and upwards. This ratio it had been proposed to call the "hæmo-renal salt index," and it seemed probable that it might afford valuable information as to the excretory power of the kidney, especially when combined with segregation of the urine in cases where nephrectomy was proposed. In cases where it was proposed to remove the kidney the urine of the better kidney should have a hæmo-renal index of about three; below that figure the prognosis was less favourable; and when below two it was serious. Observations by this method had been as yet few in number, but in general they agreed with those obtained by cryoscopy.

PATHOLOGY IN GENERAL PRACTICE.

No branch in medicine has advanced in recent years with such leaps and bounds as pathology, and its importance in clinical diagnosis cannot be too strongly insisted upon. Yet granting all this, how few practitioners in general practice are able to perform the simplest details, such as counting the corpuscles of the blood, estimating the hæmoglobin, searching a blood film for malarial parasites, staining for tubercle bacilli, staining for the gonococcus, examining and staining deposits from urine, to mention only a few of the very simplest procedures. To meet the demand for this kind of work, numerous private individuals and institutions, such as laboratories, have sprung up. The practitioner sends his samples here, pays a charge, and the results are sent him in due course. The more he does this the more he forgets how to do the thing himself, till eventually he relies entirely on this means of arriving, in many cases, at his diagnosis. Now how far is this right or wrong? Before coming to any definite decision one must glance for a moment at what the term pathology nowadays really means. It includes, for example, the subjects of bacteriology, protozoology, helminthology, hæmatology, morbid anatomy, gross and microscopical, and tropical pathology, the latter not an entity of its own but a mixture of all the foregoing plus an extended knowledge of entomology. The range, therefore, is a vast one, so vast, for example, that specialists have arisen on all its different component parts, and the general practitioner may well be pardoned if he exclaims: "How can I with my clinical work and practice be expected to be an expert on all those subjects?" His contention is perfectly justifiable as far as being an expert is concerned, but on the other hand, though not an expert, he should and ought to know many of the simple technical procedures necessary to demonstrate ordinary truths culled from the different special branches of which pathology is made up. A practical knowledge of the work required can easily be obtained at any of the post-graduate teaching associations, many of which have courses specially framed for this need, and books, variously styled clinical bacteriology or clinical bacteriology and hæmatology, give very good and accurate accounts of the various methods. The younger practitioners and those who have just recently qualified have, of course, learned those methods in their courses at their medical schools, and as far as they are concerned, a little practice is all that is necessary to keep them from forgetting the details when they commence the task of earning their daily bread. Allowing, then, that the ordinary man should be able to do his simple examinations, such as staining for tubercle, examining urines, etc., himself, there still remain a class of more complicated technical procedures which require incubators and a laboratory to be at one's disposal. Such, for example, are the Widal's reactions for typhoid and Malta fever and the recent works on opsonins and the opsonic index. It is, of course, impossible for everyone to have incubators where the cultures can

be grown and put through the necessary sub-culturing, so this branch of clinical diagnosis must still be done in laboratories. We thus see the rights and the wrongs of the question under discussion when looked at from this point of view; but there are other issues which still have to be considered. The most important of these is the gradual separation of clinical from pathological work which results from the system of the practitioner relying on someone else to do a share of his work; and this separation is a most undesirable one and often leads to serious mistakes being perpetrated.

The value of all this new work is great when taken in conjunction with the clinical phenomena, but when used alone it may, as we have just stated, be extremely dangerous and misleading. Examples are so numerous that it is almost unnecessary to mention any here; all must know the common one of a small piece of the edge of a tumour being snipped off and sent to the pathologist for examination. On this examination a diagnosis is expected to be made; yet how fallacious this may be. The sections may show nothing very definite, say, with the exception of some chronic inflammatory changes, and a return to this effect is given, while all the time the patient may be suffering from true cancer, the reason of this not being detected being that by mischance the piece selected has been taken from the outside of the growth and not from the real diseased part at all. Again, only to quote another example, a blood from a real case of enteric fever may be taken early, before the serum reaction has developed, and sent to the laboratory; the result negative is returned, and the probability is that the practitioner treats the case as something else, fully believing now that it is not typhoid. Now, if the case had been followed carefully clinically and the Widal's test used several times during the course of the illness as an adjunct to corroborate the diagnosis only, such a mistake would not occur. Another rather important point is that when work is going at a high pressure in the institutions mentioned, laboratory attendants are often called upon to do some of it, and though those individuals are quite competent in most cases, they are often careless and do not appreciate the gravity of what the examination means. This undoubtedly accounts for many of the peculiar results that are obtained and has made some individuals so sceptical that they are in the habit of sending portions of the same specimens or fluids to one or two different places at the same time. One case of a physician illustrates this forcibly. He sent a blood serum to be tested for one of two diseases to three different laboratories and got back three different results—namely, that neither disease was present, that one was present, and from the third that the other was present. In a similar manner a urine known to be diabetic was returned as no sugar present, this being due to some other samples getting mixed up with it, and some individual must have got a surprise when he got the return for a urine, say, which he was having examined for casts, as full of sugar. Mistakes like this are regrettable,

and it only shows that no one is infallible, but that is not the point. The point is that the two branches should not be divorced like this but should run in harmony together and then most of those mistakes could not occur, or if they did would be of no great

importance. The general practitioner should most certainly make a point of doing his simple routine work himself, and in some subsequent articles the commoner methods will be explained to show how simple and easy of application they are.

HEADACHES AND HEADACHE CURES.

IN view of the frequent occurrence of headache as a troublesome symptom among all classes of the community, it is not surprising that the manufacturers of proprietary medicines have seen the commercial opportunities offered by a number of the recently introduced analgesics. These, under various attractive titles, are now being sold in considerable quantities, and their efficacy is in many instances entirely beyond dispute. Headache, it is true, may be the early expression of some serious disease. But it is frequently a mere functional disturbance, and thus it is not a matter for surprise that remedies which relieve it are eagerly purchased. The medical profession has many reasons to suspect the pretensions of the advertising chemist; but this suspicion is carried too far when it leads to a determination to refuse to prescribe everything proposed as a new remedy. On the contrary, it is not less the duty than the interest of the profession to keep an open mind towards new developments, and to study the exact conditions under which new forms of treatment can be safely and successfully prescribed. To aid in this direction it is here proposed to give some account of "headache cures," of the degree of their success, and of the extent to which their use involves secondary and undesirable consequences.

The chief groups of drugs used for the relief of headache *per se* are represented by the bromides, chloral, phenacetin, phenazone, acetanilide, and caffeine.

BROMIDES.

Of the potassium, sodium, and ammonium salts of bromine but little need be said; their action is well known and their disadvantages are generally appreciated. The depressant effect of the bromides, particularly if administered frequently and regularly, is the chief objection to their habitual use for migraine, and the relief derived from them does not leave the mental faculties sufficiently clear for the transaction of daily affairs, as do many of the other remedies. And it should be recollected in prescribing proprietary medicines of unknown composition, that in order to ensure the more prompt and unflinching working of a somewhat undependable drug, bromides are often mixed or combined with the quack compounds and the fact disguised under a registered trade-name. Such remedies as *bromipin*, *brominol*, and *brominoleum*, denote by their titles the active principle in their composition, but they give no indication of the proportions present in the mixture.

CHLORAL.

The basis upon which all the chloral compounds depend is chloral hydrate—a powerful, unvarying,

and dangerous hypnotic; of the utmost value in skilled hands, peculiarly attractive for self-administration, and exceedingly fatal in an overdose, since the tolerance acquired in the habitual use of morphine does not appear to be established with chloral.

The official preparations are two only: chloral hydrate (dose, 5-20 grains) and the syrup, containing 10 grains in a drachm (dose, $\frac{1}{2}$ -2 fluid drachms). The non-official remedies into whose composition chloral enters are innumerable:—

Bromidia, combining chloral hydrate with one or other of the bromides and extracts of *cannabis indica* and *hyoscyamus*.

Dormiol (amylene chloral).

Chloralamide, a compound of chloral anhydride and formamide, said to have a less depressant influence on the heart, and to retain its efficacy after prolonged administration.

Chlorobrom, a mixture of chloralamide with potassium bromide, potent—valuable, and dangerous.

Somnal, a mixture of chloral with urethane.

Chloralose (anhydro-glyco-chloral), more toxic even than chloral hydrate, rapidly ceasing to be effective as the patient becomes accustomed to the drug, and, generally speaking, not worth the risk of administration for the relief of migraine.

Allied to chloral hydrate we have also:

Butyl chloral hydrate (*syn.* croton chloral hydrate), a drug the efficacy of which is undoubted in some cases of neuralgia, especially of the fifth nerve, but its occasional successes seem less numerous than its frequent disappointing failures.

Chloretone (tri-chlor-butyl-alcohol) possesses practically no advantages over the plain chloral hydrate, and the additional disadvantage that its therapeutic effect and toxicity are alike more variable. The known toxicity of chloral hydrate constitutes to some extent a safeguard in its administration by skilled hands.

PHENACETIN.

This represents possibly the safest group of drugs for "headache"; the after-effects are slight, the mental state is undimmed by the administration, and use does not seem to give rise to habit-formation; possibly there is a tendency to resort to alcoholic "pick-me-ups" after repeated doses at short intervals. The name "phenacetin" has in itself no meaning, and bears no relation to the actual chemical composition which is that of a paracetidin compound with acetic acid.

The activity of this class depends upon the paracetidin molecule and the strength of the various

members of the phenacetin class can be estimated, as it were, upon this basis. Besides phenacetin itself, the only preparation worthy of note is the *para-phenetidin lactate* (usually known as "lactophen"), which possesses in an even more marked degree the sedative powers of its ally, is dependable, and has an unvarying chemical composition; it is insoluble, and the dose is given as 5-15 grains.

Apart from this compound, most of the phenacetin derivatives are either mixtures or such loosely combined chemical substances that they decompose readily and thereby become utterly unreliable.

Apolysin (monobasic *paraphenetidin citrate*), *citrophen* (dibasic *paraphenetidin citrate*), *kephaldol* (a strange medley of *paraphenetidin citrate* and quinine, probably a mere mixture and certainly inert), for which many things have been claimed. *Malakin* (*paraphenetidin salicylate*). *Phenosal* (*paraphenetidin aceto-salicylate*). *Kryofin* (*paraphenetidin acetoglycollate*); and so on until the whole gamut has been sounded of organic salts of *paraphenetidin*, for all of which the claims become daily more impudent and the mis-statements more unblushing. To sum up, it may be said that the *paraphenetidin* salts have each and all some effect as hypnotics, sedatives, and analgesics, but that the acid-radicle with which the *paraphenetidin* molecule is combined has no further action than to dilute the effect of the compound according to the proportion it bears to the total molecular weight.

PHENAZONE,

or antipyrin, ranks perhaps next after phenacetin for safety and absence of ill-effects; there seems little or no tendency to habit-formation with the simple drug, but many of the derivatives on the market contain less innocuous elements, and these will be referred to in their place. By itself antipyrin exerts a rapid and useful effect upon many headaches of the migrainous character, but repeated doses may have a cumulative action and produce alarming toxic symptoms. Dose, 5-20 grains, readily soluble in water; it is incompatible with many other drugs and is usually best administered alone. All that has been said of the *paraphenetidin* salts may be applied with no less force to the antipyrin group. The "fancy" compounds are in brief: *Aceto-pyrine* (antipyrin aceto-salicylate), also called *pyrosal*; *salipyrin* (antipyrin salicylate); *tolypyrin*, a chemical ally of antipyrin whose composition is doubtful, but its non-activity established, from which has been derived *tolysal*, the salicylate of *tolypyrin*; *ferripyrin*, a compound of ferric chloride and antipyrin, possessing a colour pleasing to the eye and apparently harmless to the system; *bromopyrin*, a mixture or compound presenting the combined effects of uncertain proportions of antipyrin and a bromide; *hypnal*, a compound with chloral which should be properly included under its more potent and dangerous constituent; chloral hydrate should be preferred to hypnal as a drug whose action is known and toxicity well established. *Pyramidon* (dimethyl-amido-antipyrin), together with its two *camphorates* and a *salicylate*, may possess an anti-

pyretic effect, but is therapeutically devoid of value as an analgesic or sedative.

ACETANILIDE.

Acetanilide, or antifebrin, forms the third of the group of synthetic compounds upon which the majority of "headache cures" are based. It is more powerful, both in its therapeutic action and its toxic effects than either phenacetin or antipyrin. The dose is 1 to 3 grains. (N.B.—60 grains taken in six powders have proved fatal).

Acetanilide enters largely into certain proprietary drugs. *Antikamnia*, an unknown combination probably containing acetanilide, caffeine, and sodium bicarbonate; *antinervine*, consisting of acetanilide, ammonium bromide, and salicylic acid; *ammonol* and *phenalgin* are ammoniated derivatives of acetanilide; *antiseptine*, although not betraying by its title any connection with acetanilide, depends for its action on the fact that this enters largely into its composition; while the same is true of the speciality known as *antitoxine*. *Bromo-acetanilide*, a so-called compound of bromine with acetanilide, may be to all intents regarded as a mixture of acetanilide with a bromide, even when masquerading under its pseudonyms of *antiseptin* and *asepsin*. *Hydracetin* is a derivative of acetanilide, chemically known as acetyl-phenyl-hydrazin, more powerful and dangerous even than the former. *Exalgin* (methyl acetanilide) possesses no advantages over acetanilide, but may be used as a substitute, for its action is practically identical, though both action and toxicity are greater. Dose, $\frac{1}{2}$ to 1 grain.

CAFFEINE.

Apart from the foregoing groups of drugs caffeine enters so commonly into the composition of proprietary "headache cures" that it deserves some mention. Taken by itself it is only occasionally effective, but in combination with phenacetin or antipyrin it appears to aid in their action and perhaps counteracts their possible depressant effects. The majority of so-called caffeine compounds, such as caffeine hydrobromide, are so unstable as to decompose in the presence of water, thereby being in no way better than a mixture of the constituents, which are cheaper and more readily estimated as therapeutic agents. *Migramine* is the fancy name for a double citrate of caffeine and antipyrin. *Antikamnia* has been already mentioned as a compound of acetanilide with caffeine, while *pyretine* and *phenatol* are suspected of owing to the same active ingredients.

From the above it will be readily seen that by combining the ordinary pharmacopœial drugs into such mixtures as experience may suggest, no less reliable compounds may be arrived at than those so loudly vaunted by the patent-medicine vendors, and the satisfaction of knowing beforehand the proportions and probable therapeutic effects of the individual drugs, whose respective actions remain usually unaltered by mixing, should far outweigh the mere elegance of a title assumed to give an air of "verisimilitude to an otherwise bald and unconvincing narrative" of quackery.

PRACTICAL NOTES ON DIAGNOSIS AND TREATMENT.

General Tuberculosis.

GENERAL tuberculosis in childhood is a very rapid disease, being usually of a month or six weeks' duration.

Anæmia and Phthisis Pulmonalis.

THE early detection of tubercular mischief in anæmic subjects is of vital importance, for in my experience the disease in such persons tends to advance rapidly.—*Dr. J. Edward Squire.*

Chancre of the Tonsil.

THE diagnosis of chancre of the tonsil is usually attended by some elements of difficulty since the sore may be a secondary one. If it be a chancre it ought to be on one side only, with a glandular bubo on one side only of the neck, and there ought to be a clear history of its having preceded by some weeks the eruption on the skin.—*Mr. Jonathan Hutchinson.*

Ergot in Migraine.

DR. W. H. THOMSON advises ergot in migraine and also in neuralgias which recur periodically. He orders 1 drachm of the liquid extract to be taken in water as soon as the pain is noticed, and the patient is then advised to remain in the recumbent posture. In migraine three such doses are taken at intervals of an hour; in neuralgia the drug is given thrice daily.

Toothache.

THE following is recommended to relieve the pain of a carious tooth:—Extract of opium, camphor, of each 5 parts; balsam of Peru and mastiche, of each 1 part; chloroform, 10 parts. To be used to plug the cavity.

Eclampsia in Pregnancy.

AS to how to treat the pregnancy in a bad eclampsia, opinions differ. I strongly advise you to induce labour, and if labour is in progress to accelerate it judiciously. The use of full doses of morphine ($\frac{1}{2}$ to $\frac{1}{4}$ grain) hypodermically we owe to Professor Veit. Should the fits persist after the first dose, another should be given in a few hours' time. It should not be given when there is coma.—*Dr. Berry Hart.*

Thyroid Gland in Myxœdema.

THE dose for a patient with myxœdema or cretinism must be very much smaller than when the drug is given for other diseases. A dose which would be absolutely without effect on a healthy man may in these patients produce profound constitutional disturbance. When once a cure has been obtained, a bi-weekly, weekly, or even fortnightly dose is sufficient to maintain a proper condition of health.—*Dr. Hector Mackenzie.*

THE BOOK WORLD OF MEDICINE AND SCIENCE.

FIBROID TUMOUR. WITHOUT OPERATION. By JOHN SHAW, M.D. (Swan, Sonnenschein and Co., pp. 80. Illustrations 2.)

The occasion of the publication of this little book is duly set forth by Dr. Shaw in his preface. It appears that, in 1904, Dr. Shaw submitted to the editor of the *British Medical Journal* "a paper describing a non-operative treatment of certain diseases of women . . . such as it is the fashion to deal with by mutilative operations." The paper was subsequently returned with the intimation that the editor "saw no prospect of being able to publish his paper at an early date," and later "met with the same fate" at the hands of the editor of the *Medical Press and Circular*. The preface concludes: "As I have been unable to reach the ear of the medical profession (and thus the public) through the ordinary professional channels, it is my hope to do so through the medium of the present essay." Unfortunately the book is somewhat of a philippic against the recognised operative treatment, with an occasional word for the *British Medical Journal*. The mental attitude of the writer is indicated by the frequent occurrence of the expression, "mutilative operations," and by the following paragraph on operative statistics: "I gladly admit that there are a few operators whose published statistics are more favourable as to primary mortality than those which I am about to quote. But such success being, in my judgment, quite exceptional, it would be no wiser to accept it as a motive for action, or the basis of argument, than it would be for wild game to regard the well-being of a decoy duck as an adequate guarantee for the like conditions favouring the birds attracted by it." Having been "unable to reach the ear of the profession (and thus the public) through the ordinary professional

channels," Dr. Shaw frankly addresses himself to the lay reader in the first sentence of the first chapter thus: "For the convenience of the non-medical reader . . . it will be desirable to explain certain technical terms." These include such words as *abdomen* and *womb*, and the chapter closes with a reference to the glossary at the end of the book. On turning to the glossary we find the following playful excursion into philology: "Womb. Originally the belly: the place where the young are conceived and kept till birth. The word 'woman' is perhaps connected with 'womb.' Perhaps! but woman is Anglo-Saxon *wifman* from *wif*, meaning wife; while womb is the same word as old German *wambe*, from a root, common to all Indo-germanic languages. For what class of reader has the book been written?"

BOOKS RECEIVED.

BAILLIÈRE, TINDALL, AND COX.

"Surgery of the Rectum." By Fred. C. Wallis, M.D.
"Lessons on Massage." Third edition. By Margaret D. Palmer.

LONGMANS, GREEN AND CO.

"The Essentials of Histology." Seventh edition. By E. A. Schäfer, LL.D.

T. FISHER UNWIN.

"The Sanitary Evolution of London." By Hy. Jephson, L.C.C.

THE SCIENTIFIC PRESS, LTD.

"A Manual for Nurses on Abdominal Surgery." By H. Burrows, M.B.

"THE LOCAL GOVERNMENT JOURNAL" OFFICE.

"The Local Government Annual and Official Directory," 1907.

SURGERY PUBLISHING CO., NEW YORK.

"Plaster of Paris, and How to Use it." By Martin W. Ware, M.D.

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

CURRENT HOSPITAL TOPICS.

Hospital Railway Cars.

AMERICAN railway companies are introducing into their system the use of cars fitted up with all necessary surgical appliances so as to assume the nature of a hospital on wheels. These cars are intended for use in cases of accident at a distance from a hospital. The immense distances traversed by some of the lines through sparsely populated districts render such a provision for accident emergencies the more necessary. The Erie Railway Company has constructed a hospital car which we understand has been pronounced by surgeons to be equipped in the most complete and perfect manner possible. It is 60 feet long and divided into two compartments, one of which is fitted up as an operating-room with table, sterilisers, and all other necessary appliances. The other compartment is arranged as a ward-room with 11 bedsteads and a lavatory and saloon. Both parts are provided with sliding doors, so that the patients can be conveyed to the car and from one division to the other in stretchers. Hot and cold water is provided from tanks just under the roof of the car. Six-wheel bogeys are used so as to insure the utmost freedom from vibration. A similar hospital car has also been adopted by the Southern Pacific Railway Company at a cost of £3,600. This car is 76 feet long, and runs upon two six-wheel bogeys. Under ordinary circumstances this car can be used partly as a drawing-room and the rest as a sleeper, but the whole can be rapidly transformed into a "hospital" with operating-room and ward similar to the car described above.

The Hospital Saturday Fund.

MR. REGINALD B. D. ACLAND, K.C., at the annual dinner of the Hospital Saturday Fund presented Mr. W. G. Bunn with a beautifully illuminated address and a cheque for £134 on his retirement from the post of secretary. Mr. Acland affirmed that the Hospital Saturday Fund had now a real position—very different from what it had been in the old days—among the charitable agencies of London, a position won by a great deal of hard work. Mr. Acland dwelt upon the difficulties of the old days, and reminded his audience that although the first year's collections exceeded £5,000, at the end of another thirteen years the total sum raised had only been increased by £733. At the present day, in lieu of the dark offices in a court leading out of Fleet Street, the Saturday Fund had its own

freehold premises, which were fitted up to enable them to do their work in comfort, and they had a proper staff, sound organisation and the good wishes of everybody. Mr. Acland did not claim that all this progress was due to Mr. Bunn, but he said, without fear of contradiction, that the Fund never could have made the progress it had without a man like Mr. Bunn, who combined within himself many qualities. Mr. Bunn possessed a perfect knowledge of what were called the working classes, the confidence of the great friendly societies of which he was so distinguished an ornament, absolute integrity, unflinching courtesy, a great power of speech, and an unwearying power of work. The Fund now raised £26,000 a year, and Mr. Acland looked forward to the time when it would distribute at least £50,000 per annum amongst the hospitals and medical charities.

Hospitals and Taxation.

FOR more than forty years efforts have been made over and over again to exempt hospitals from rates. A century and a half ago the hospitals paid neither rates nor taxes, as public opinion in those days held that gifts for the sick poor were in reality gifts to God which should be free from all imposts of the kind. Many things have happened in the interval which have necessitated a reconsideration of this position, and have led to the taxation of all public institutions, whether devoted to charity or otherwise. Nearly forty years ago the agitation to exempt hospitals from rating took a very practical form, and under the ægis of a society for the exemption of hospitals from taxation much work was done, which resulted in large majorities being obtained in the House of Commons in favour of the principle of non-taxation. The matter was then taken up by Mr. Gladstone's Government, and after conference with the Opposition, it was determined to submit Government buildings to taxation in order to affirm the principle that every building in a great city, occupying an important site, should be liable to be rated. An illustration of the desirability of this policy was afforded by the history of the city of Quebec, where the principal sites were occupied by institutions, chiefly religious, which paid no rates or taxes. This position largely increased the rates which had to be levied on ordinary people in that city, and tended for many years to cripple the city's resources, and to prevent developments which were

of great importance to the well-being of the inhabitants as a whole. A movement has been started in England, with the object of abolishing the legacy duty paid by hospitals. In our view, however, a question of this kind cannot be dealt with piecemeal. It is necessary first of all to determine the principle of taxation and rating to be applied to all properties, and in no other way is it practically possible to hope that any remission will be obtained in favour of hospitals.

Strength in Little Things.

DURING the last ten days we have received probably one dozen appeals, sometimes three in a day by different posts, from the same source. The sender is a lady who lives in Worcestershire, and who asks for contributions to her Lenten collection. Each envelope contains six documents, of the commonest kind and very indifferently printed. Two of them are cards, one for a shilling fund, and the other divided into spaces for a collection in pence, threepences, sixpences and shillings. The inter-spaces are quite erratic, and are based on no system for

raising a definite sum under each heading. There is a four-page green bill, 10½ inches long, containing a statement of accounts for the year 1906, duly audited, which is a curiosity in its way; a white bill, printed on both sides, 14 inches long, containing a list of people in reduced circumstances; a small red bill, printed on one side, urging that each card should bring in 6d., being one penny for each week in Lent; and a notice on a little white slip begging those who receive more than one appeal not to be annoyed by that fact. At the first glance it is impossible to imagine that anything more hopeless could be devised by way of appeal literature. Yet the accounts show that this literature last year produced upwards of £4,000; and that the total expenditure on postage, printing, clerical expenses and the auditor amounted to a little over £500, or say thirteen per cent. Who can maintain that appeals through the post are unproductive in the present day, when judged by the instance we have just given? It is further an undoubted fact that missionary societies raise several millions every year by similar methods.

THE VARYING PRICE OF DRUGS.

THERE is perhaps no class of article in daily demand the value of which fluctuates so much as does the value of drugs. Bread, clothing, butchers' meat, and other necessities of life maintain as a general rule a steady price, but the cost of drugs is constantly varying. Medical practitioners and chemists are sometimes at a loss to understand why one week a certain drug is quoted at such and such a price, and the following week at quite a different figure. Thus a few days ago the value of sulphonal was 3s. 6d. per lb.; to-day it is quoted 11s. 6d. Less than three months back quinine sulphate could have been bought for 8d. per oz., while to-day it cannot be obtained much below 1s., even in large wholesale quantities. At one time *santonin* cost 5s. per lb.; now it costs 38s. 6d. *Camphor* is worth four times as much as formerly. *Cascara sagrada* has at one time and another been more than double and almost less than half its present price; and so one could continue to name drug after drug which has varied in value. It is only reasonable to inquire why these articles are continually varying in price, and the answers to such inquiries will be found not altogether uninteresting.

It should be stated at the outset that the cause of these fluctuations is, in every case, beyond the control of the wholesale druggist. He has just as little to do with the changes as have the medical practitioner, the chemist, and the general public, and in fact he is more seriously handicapped by varying prices than any of these. For instance, the wholesale druggist contracts to supply a hospital with certain drugs for a definite period; when he sends in his tender one or more of the drugs quoted may be half the price to which it may rise before the contract is terminated, and unless the contractor has had sufficient foresight to cover himself on making the contract he may be a heavy loser. It is obvious that the contractor will gain if prices go down, but the tendency of late has been in the other direction.

To a great extent the value of drugs like most other

commodities is governed by the natural law of supply and demand; but not always. To find the cause of the "ups" and "downs" of the drug market one must examine each case on its own merits. Thus it would seem extremely unlikely that there has been such a divergence between the supply of and demand for sulphonal as to justify a sudden rise from 3s. 6d. to 11s. 6d. per lb.; in fact, there has been no such divergence, and the advance is due to a combination of makers, who, knowing the difficulties surrounding the manufacture of this product, feel assured that there is no need to fear competition. During the past few weeks the demand for quinine has increased enormously, owing to the prevalence of influenza; on the other hand, the supplies have been below the average, so that there is nothing to be surprised at in the increased value. The time when quinine cost 20s. an oz. will be in the memory of more than one who will find it difficult to understand to what the very substantial drop in price is due. It is common knowledge that at one time the world was practically dependent for its supply of cinchona bark on the trees which grew wild in the forests of Peru; not only was this bark poor in alkaloids, but the reckless system of collecting it resulted in the disappearance of the tree from many districts. The possibility of the extermination of the source of this valuable drug led the Dutch to attempt the cultivation of the tree, and the result of the attempt is that to-day the great bulk of our supply of cinchona bark is drawn from the island of Java. By cross-fertilisation the Dutch succeeded in creating a hybrid which yields four or five times as much quinine as the Peruvian variety. An idea of the importance of the cinchona trade of Java can be obtained from the fact that last year more than six and a half million kilogrammes of bark were shipped to Europe, representing something like 392 tons of quinine sulphate. The amount exported from Java does not represent the total production, for large quantities of bark are retained for the manufacture of quinine locally.

India, which is a very large consumer, grows its own bark and makes its own quinine. The reason then for the fall in price of quinine from 20s. to 1s. an oz. is the increase in supply of raw material richer in the alkaloid, the increase being altogether out of proportion to the increase in consumption, however great.

The fluctuation in value which is sometimes of daily occurrence may be due to several causes. In the ordinary course the value of quinine depends on the amount of the shipments from Java, which is declared at half-monthly intervals, and the price paid for bark in the public sales held in Amsterdam every fifth Thursday throughout the year. But there is another factor to be reckoned with—namely, speculation. Quinine is a great favourite with speculators, and when we hear that so many hundred thousand ounces have changed hands, it does not necessarily follow that that amount has passed into consumption. The buyer may never see his purchase, which before the end of the day may have passed to another at a price a fraction of a penny higher or lower. In this way the purchase may be bandied about from one to another.

Speculation may drive a coach-and-four through the law of supply and demand. So it often happens that values fluctuate even when production and consumption continue in the same ratio. Speculation is by no means restricted to the quinine market, but is a very important element in the market for many other drugs, the favourites of late having been cascara sagrada, cloves, and menthol.

By far the greatest proportion of our supply of camphor comes from Formosa, and this drug is a monopoly of the Japanese Government. Camphor has never been dearer than it is at present, owing to scarcity, which in turn is due to the fact that the camphor forests are overrun by savages. The probabilities are that, as these savages are

gradually brought into a state of submission, the supply of camphor will increase. But the demand is also increasing, and it is possible that until synthetic camphor is produced in a sufficiently pure state and on a commercial scale, the Japanese product will not be obtainable at normal prices.

Santonin is manufactured by a syndicate in Russian Turkestan, which has a monopoly of this drug. When competition existed among makers the price was 5s.; now that santonin is in the hands of a monopoly it is worth nearly 40s. per lb. It often happens that a drug which is cheap one season is dear the next, and then again cheap a year or so later. Take, for instance, ipecacuanha, which is very dear at the present time. At the price it was selling two years or so ago the exporters probably found that there was not sufficient profit left for them after paying the collectors in Matogrosso, and packing and carting it to the coast. The result was that less was collected. Tempted by the high prices recently paid in London, larger supplies will be shipped in course of time, and values will recede. Then history will repeat itself.

Other drugs beside camphor and santonin are in the hands of monopolies, and a large number, including hypophosphites, caffeine, bromides, iodides, morphine, codeine, cocaine, mercurials, salicylates, chloral hydrate, phenazone, and many other drugs are managed by combinations or conventions. It sometimes happens that when a maker outside a convention comes into the market as a competitor, a period of low prices is experienced, the period lasting until such time as the competitor ceases to exist, or joins the combination.

It will be gathered from these few notes that the chief causes of the varying value of drugs are: under or over supply, increased or decreased demand, monopolies, speculation, and combination.

HOSPITAL AND POOR LAW PROBLEMS.

THE TREATMENT OF POOR-LAW CASES IN VOLUNTARY HOSPITALS.

IN the recent discussions which have taken place on the excessive amount of free medical relief given by the voluntary hospitals, a strong point has been made of the abuse represented by the large number of Poor-law cases admitted to treatment, which could properly be dealt with in the Poor-law infirmaries. Poor-law guardians have the power to grant subscriptions in aid of institutions or objects which tend to diminish the charge upon the poor-law funds. Hospitals come under this category, and boards of guardians frequently make an annual subscription to the hospitals situated in the area over which they exercise jurisdiction. The inadequacy of these subscriptions was brought out at a meeting last Friday, the 1st instant, at the Medical College of the London Hospital. The object of the meeting was to try and induce the guardians in the poor-law unions from which patients were sent to the London Hospital to take a more active interest in the work of this great charity by making their contributions bear some proportion to the cost entailed upon the hospital by the reception of Poor-law cases. At the present time, as the Chairman of the London Hospital pointed out, the guardians gave very meagre subscriptions to the London Hospital. The subscription from the Guardians of the City of London and that from Poplar, for instance, was £21 per annum; the Guardians of West

Ham contributed 25 guineas, and those of Hackney 12 guineas; but none of the other guardians gave anything to the London Hospital. How totally inadequate these amounts are is proved by the following facts stated by Mr. Holland. Ten years ago, *i.e.*, in 1896, the expenditure of the London Hospital was £64,000 a year; now it is over £90,000. In the 10 years nearly half a million had been spent on rebuilding the old hospital which had been doing good service for 140 years. The increase in the volume of work undertaken by the London Hospital is shown by the number of patients treated. In 1896 the in-patients totalled 11,300; in 1906 they had increased to 14,139—an increase of 2,839. In 1896 the out-patients amounted to 158,000, and in 1906 they were over 230,000, an increase of upwards of 72,000. The Chairman claimed that the increase in the out-patients was due to the establishment of new departments for ophthalmic cases, nose and ear, lupus, and the "new opsonic work, by which they hoped to conquer that dread disease consumption." Of the total expenditure only £20,000 a year was derived from the rents of the hospital's property adjacent to the institution. Another good point made by the Chairman was that as a matter of mere humanity, and in the interests of the patients, it was desirable to have an understanding between each hospital and each board of guardians in order to secure that, when a poor-law case who was the inmate of a hospital had to be removed to the infirmary, arrangements should be made to transfer such patients direct to their own parishes. The Chairman submitted a list of the number of patients the London Hospital were treating from the various parishes. In making his calculations he had taken the cost of each

in-patient at £5 18s. per annum, and on that basis had arrived at the following figures :—

IN-PATIENTS AT THE LONDON HOSPITAL, WHITECHAPEL, IN 1906.

| Name of Parish. | No. of In-patients. | Cost to the Hospital. |
|-----------------|---------------------|-----------------------|
| Whitechapel | 1,154 | 5,866 |
| St. George's | 1,019 | 5,180 |
| Stepney | 877 | 4,456 |
| Mile End | 855 | 4,346 |
| Bow | 782 | 3,975 |
| Hackney | 640 | 3,253 |
| Poplar | 545 | 2,770 |
| Stratford | 411 | 2,090 |
| Limehouse | 312 | 1,586 |
| City of London | 191 | 970 |
| Stoke Newington | 81 | 411 |
| Totals | 8,118 | £41,262 |

OUT-PATIENTS IN 1906.

The figures for out-patients (reckoned at 2s. each) were :—

| | | £ |
|---------------|--------|--------|
| Bethnal Green | 10,292 | 1,029 |
| Stepney | 10,132 | 1,013 |
| Mile End | 8,076 | 807 |
| St. George's | 6,906 | 690 |
| Bow | 5,100 | 510 |
| Spitalfields | 4,866 | 486 |
| Whitechapel | 4,596 | 459 |
| Hackney | 4,240 | 424 |
| Poplar | 3,639 | 363 |
| Shoreditch | 591 | 59 |
| Totals | 58,438 | £5,840 |

It does not appear to what extent, if at all, the number of patients from the various parishes enumerated in the above tables were sent in by the Guardians or in any sense as Poor-law cases. No evidence was adduced as to the circumstances of the patients, or to show whether any, and if so how many, of them were in receipt of parish relief. It was not made clear whether the 8,118 in-patients and the 58,438 out-patients included in the tables had, or had not, any connection with the work of the Guardians, or any relation to it. Information on these points is essential for the purpose of deciding the extent to which the London Hospital may properly look to Guardians for compensation for treating these patients within its walls. If it is claimed that except for the existence of the London Hospital the whole of these cases would have been treated in the Poor-law infirmaries, then it is clear that more than half the annual expenditure upon patients at the London Hospital might, under a better system, be saved, because in such a case it would properly devolve upon the Guardians and not upon the hospital authorities. No addition to the annual subscriptions of the Guardians is likely to amount to a sum which can approach £47,000 per annum, the actual expenditure annually involved, as the above tables show.

SEVERAL POINTS RAISED.

The meeting cannot fail to be useful because it has called attention to precise figures, which, on the face of them, should yield instructive information, if they are thoroughly and exhaustively treated, so that all the facts may be clearly demonstrated in regard to the actual proportion of this £47,000 a year, spent by the London Hospital, which ought, properly, to be borne by the Poor-law authorities. One of the Guardians present complained that the London Hospital often returned surgical cases to the parish too quickly, that is, before the patient had completely recovered. The chairman replied, that the charge that the London Hospital took cases from the Poor-law and turned them out too soon, could only be answered by pointing out the great difficulty there was, owing to the pressure on its beds, which prevented the hospital from permitting them to be occupied by patients for the purposes of convalescence. The chairman agreed that often in-patients ought to remain longer than they did in the hospital, but what was the hospital to do to prevent it? It was a choice of evils, and the hospital had to turn out cases in order to make room for new

patients, whose cases were even more pressing. Replying to a guardian who urged that the number of cases admitted should be limited, as at present many of them either ought to pay for themselves, or to go into the workhouse infirmary, the chairman claimed that no one was admitted to the London Hospital who could afford to pay for a doctor, and that, as to the workhouse infirmary cases, he had called that conference to avoid the necessity of too strict a reference to the Poor-law, which, he thought they were all agreed, was undesirable. The chairman further suggested that, the Guardians having ascertained the amount, which the hospital saved each board by admitting Poor-law cases, should then agree to contribute one-twenty-fourth of the total expenditure each year to the London Hospital. In the result, the meeting agreed that there was no need for delay in the transfer of Poor-law patients from the London Hospital to the infirmaries and workhouses, and that arrangements should be made with the relieving officers to prevent any such delay in future. It was further understood that the various points raised would be brought before each Board of Guardians represented at the meeting.

A NEW SYSTEM ESSENTIAL.

We shall watch the outcome of this meeting of February 1 with genuine interest.

THE VOLUNTARY HOSPITALS AND POOR-LAW GUARDIANS.

The present relations between the voluntary hospitals and the Poor-law Guardians are anomalous. On the one hand, accident cases are admitted to the Poor-law infirmaries and payments are exacted, wherever possible, from the patients' friends by the Guardians, though such cases are treated without payment at the voluntary hospitals. On the other hand, as the figures quoted at the meeting indicate, a large sum of money is expended at the present time by some or all of the voluntary hospitals upon Poor-law cases, though in fact the money is raised for the benefit of the sick poor who are not provided for under the Poor-law, and who are above the pauper class, being, in fact, self-respecting and self-supporting citizens. These facts illustrate the anomalies of the present relations between voluntary hospitals and Poor-law authorities. The whole position in regard to these matters requires reconsideration and readjustment. Under a reformed system the Poor-law, with its modern and well-equipped infirmaries, might relieve the voluntary hospitals of much of the work which they at present do, though it does not properly belong to them, and the Poor-law infirmaries might and ought to be made available for the training of medical students. If these questions were to be intelligently dealt with, the position of London, as the centre of medical education, would be immeasurably strengthened; the voluntary hospitals would be provided with adequate funds to do all the work which properly devolves upon them; the Poor-law infirmaries would take their proper place in the existing system of medical relief, and every poor person, when ill, would then secure the maximum of efficient treatment with the minimum of difficulty and trouble to themselves and their families.

A SAD CASE.

THE Church Army makes a strong appeal for help in the following sad case: The widow of a physician (M.R.C.P. and M.R.C.S.) formerly in excellent practice in the West End of London finds herself in her old age reduced to less than bare necessities. All she has to depend upon is an annuity of £20 a year from a medical charity (which is sufficient to pay her rent) and 5s. a week given by her children, which is all they can possibly afford. The husband was compelled to relinquish his practice in consequence of a long and painful illness. Unfortunate speculations completed his ruin, and he was unable to provide for his widow and family. The poor old lady, who is eighty-one years of age, is crippled with rheumatism in both knees, and is only able to crawl about a very little. Her sight is very bad, and she is entirely unfit to do any sort of work. It is desired to raise a small fund out of which an allowance can be made to supplement her income. Communications should be addressed to Mr. Colin F. Campbell, Hon. Social Secretary of the Church Army, 55 Bryanston Street, W., who will gladly answer all inquiries.

NEWS AND COMING EVENTS.

THE Hunterian Oration at the Royal College of Surgeons will be delivered on Thursday, February 14, at four o'clock in the afternoon. The orator for the year is Mr. Henry T. Butlin, F.R.C.S., D.C.L., consulting surgeon to St. Bartholomew's Hospital.

IN compliance with a wish of the popular actor, the executors of the late Mr. J. H. Toole have endowed a bed in Charing Cross Hospital to be known as the Toole bed. A further sum of £225 has been left by Mr. Toole to the National Hospital for the Paralysed and Epileptic, Queen Square.

THE next meeting of the University College Medical Society will be held in the Medical Library, University College, Gower Street, on Wednesday, February 13, at 8.30. Dr. Risien Russell will be in the chair, and Dr. Henry Head, F.R.S., will read a paper on "The Grouping of Sensory Impulses."

A CONSTANTINOPLE correspondent reports that the Ottoman Government has decided to build a new hospital at Stamboul as an annexe to the Hamadié Hospital at Shishli. The new building will have a special ward for obstetric and gynaecological cases, and among the private subscribers to the building fund is H.I.M. the Sultan.

THE Royal Sanitary Institute will meet at Stafford on February 18, opening its proceedings with a paper for discussion by Dr. Reid, medical officer of health for the county, on Sewage Purification. Medical men desirous of attending the lunch and opening meeting are requested to apply direct to the secretary not later than February 9.

THE second Lettsomian Lecture before the Medical Society of London will be delivered on February 18; the third will be delivered on March 9. The lectures commence at 9 P.M., and the lecturer, Dr. C. E. Beevor, has chosen as his subject the many interesting points in connection with the diagnosis and localisation of cerebral tumours.

THE death is reported of Professor Budin who died at Marseilles during the latter end of January from an attack of pneumonia. Budin succeeded Tarnier as teacher of clinical obstetrics in the University of Paris, and his work in gynaecological and obstetrical medicine has become classical. His latest work, "The Nursling," of which an English translation has just been published, has had a wide popularity in France. Professor Budin was an enthusiastic member of the League Against Infantile Mortality, of which he was one of the founders, and his last public appearance was at the annual conference of the League.

AN interesting report has been issued by the Commission recently appointed by the Scottish Temperance Legislation Board to visit Norway and report upon the liquor licensing laws there in force. The report gives a full account of the existing legislation in Norway with reference to the sale and consumption of intoxicants. Local option is exercised very largely, and total prohibition is favoured in the smaller towns; the larger towns preferring "stringent control and restriction." Such control is vested in the "Samlags"—disinterested companies of management. The commissioners put on record their opinion that this limitation of the liquor traffic has done much to transform Norway from one of the most drunken to one of the most sober of European nations.

AMONG the more important forthcoming meetings of foreign professional societies are the following: the German Society of Orthopaedic Surgery, sixth annual congress, at Berlin on April 2; the German Surgical Society, annual meeting at Berlin on the same date; the Seventh International Congress of Physiology, at Heidelberg, commencing August 13, under the presidency of Professor Kossel; German Balneological Association, eighth annual congress under the chairmanship of Professor Liebreich, at Berlin on March 7.

THE annual meeting of the subscribers of the Italian Hospital, Queen Square, W.C., was held on January 18, the Marchese di San Guiliano, the Italian Ambassador, presiding. This hospital has treated more than 17,000 patients during the year. In moving the adoption of the report of the hospital committee Dr. Cassaneda, the doyen of the consulting staff, stated that the King of Italy was cordially in agreement with the committee's proposal to establish an endowment fund for the hospital.

THE Secretary of the Rural Housing and Sanitation Association makes an appeal on behalf of an Association which has done, and is doing, very useful work. The Rural Housing and Sanitation Association is entirely non-political. It was founded some four years ago, and has already been the means of improving sanitation and increasing and improving the supply of cottages in many country villages. The importance of such work, not only in raising the health of the population, but in helping to stem the tide of migration to the towns, can hardly be over-estimated; and in those cases where the authorities are apathetic or local interests are hostile, the assistance of an independent association with experience of other cases to guide it has been found to be of the greatest possible value. Everywhere it is useful in forming public opinion and strengthening the hands of those who are working for moderate measures of reform. Subscriptions and donations may be sent to the Secretary, at the offices of the Association, Parliament Mansions, Victoria Street, S.W.

AN important Army Order was issued on Saturday last with reference to the instruction of officers, non-commissioned officers, and men in sanitation. It is laid down that general officers commanding-in-chief shall arrange for at least one annual course of lectures in sanitation for officers, the lectures to be given by the command sanitary officer or by a selected officer of the Royal Army Medical Corps. After March 1, 1908, lieutenants will be required to pass an examination in sanitation before promotion to the rank of captain, and officers of companies, squadrons, etc., will give instruction to their non-commissioned officers and men in sanitation. On mobilisation being ordered, a Sanitary Inspection Committee will be formed for service in the field. The duties of the Committee will be to ascertain that sanitary appliances and materials of all kinds required for the Army are forthcoming, and that an adequate reserve is maintained; to assist general officers and the Medical Service in their efforts to maintain the health of the Army by co-ordinating not only the work of the different military branches, but also the military and the civil organisations of the country or area occupied; to initiate schemes of general sanitation, and to serve as a board of reference for the solution of sanitary questions; to visit and inspect stations occupied by troops, to advise local authorities regarding necessary sanitary measures, and to further in every way the maintenance of satisfactory sanitary conditions.

EDITOR'S LETTER-BOX.

[Our Correspondents are reminded that prolixity is a great bar to publication, and that brevity of style and conciseness of statement greatly facilitate early insertion.]

THE UNIFORM SYSTEM OF HOSPITAL ACCOUNTS.

To the Editor of THE HOSPITAL.

SIR,—As regards the amended uniform system of hospital accounts, issued on December 1, 1906, by the three great hospital funds, in the form of a red-covered shilling pamphlet, we desire to submit a few observations.

1. We assume that the new system cannot apply to the metropolitan dispensaries—inasmuch as the Royal Fund has refused to recognise the public services of the dispensaries, and as the word dispensary does not, so far as we can see, occur in the said pamphlet, and the directing words on page 2 of same refer only to the changes which have been determined upon and which all hospitals applying for grants from either of the funds in future are requested to observe.

2. Whatever costly or complicated system of accounts may be needed for the hospitals, it would appear to us most unfair to inflict same upon the poor dispensaries, and we venture to express a hope that the dispensaries may be allowed to adopt the new income and expenditure account set out on pages 8 and 9 of the said pamphlet, as a cash account, and with the addition of the balances at the beginning and end of the financial year, without which we venture to affirm that no subscriber can form an accurate idea of the financial position of the institution to which he is subscribing.

3. The complicated balance-sheet on page 10 of the pamphlet is obviously unsuited to the simple requirements of a dispensary.

4. In any case we are assuming that as the alterations are to date from January 1, 1907 (page 2 of pamphlet), they cannot be held to apply to the accounts for the year ending December 31, 1906.

We are, sir, yours obediently,

ARTHUR R. WHITE,

Hon. Treasurer.

A. HERBERT WEBBER,

Hon. Secretary,

Clapham General and Provident Dispensary.

THE RATIONAL USE OF DISINFECTANTS.

To the Editor of THE HOSPITAL.

SIR,—I notice in your issue of February 2 that it is claimed by another firm that Jeyes' Company were not the pioneers of the method of standardising disinfectants by bacteriological examination. The appreciation shown by this firm for the bacteriological method is indicative of its value, and they therefore claim that it has been for over fifteen years a foremost principle with them. That they derived the principle from Jeyes' method of standardising is indisputable, since for five years previously to their entertaining the subject Jeyes had distributed a large literature dealing with this aspect of the question, dating from the time when Professor Attfeld, in 1887, conducted a careful series of experiments on the relation of Jeyes' Fluid to micro-organisms. He pronounced the Fluid to be a true germicide, a true disinfectant, and a true antiseptic, and stated that no microbe would long resist its action. Each succeeding year found new investigators, and Koch, Esmarch, Eisenberg (in 1888), Max Kortün, and a host of others made valuable experiments with Jeyes' Fluid, known on the Continent as Creolin, although now denominated Cyllin. This was five years prior to the discovery of Izal; therefore Izal must

have followed Jeyes' Company in giving a guarantee "in definite and scientific terms."

The *British Medical Journal* in 1888 had reported that, "compared with carbolic acid, it was found that a 3 per cent. mixture of Creolin (i.e. Cyllin) killed the spores of the anthrax bacillus in a period of time in which a carbolic mixture of nearly three times the strength had no effect at all." The same might be said of the cholera bacillus and of all the other micro-organisms known at that time. The standardisation of disinfectants was originally introduced and developed by Jeyes' Company, and the modern methods now adopted are merely a development of those of 1887.

Your correspondents contend that the "pure culture" method of standardisation is quite useless in standardising disinfectants which will be used in impure media. This is as it may be; it all depends upon the disinfectant; but they have not yet appreciated the fact that Messrs. Jeyes have demonstrated that it is easy to determine the action of Cyllin in any form of organic material: for example, urine, pus, or sputum. If pus is to be disinfected, the disinfectant is standardised by a measure of albumen; where sputum is concerned the proportion can be established by a standard of mucin. The Rideal-Walker method of testing the activity of disinfectants in the presence of organic matter was originally suggested by Jeyes' Company. In such tests they show the actual results obtained when different organic diluents are used in place of water, and find that whereas other disinfectants show a considerable drop in efficiency, Cyllin does not vary more than 1.5.

Your correspondents allege that the Hebling and Passmore pamphlet "upheld the chemical as against the bacteriological method." This is stating but half a fact. Here are some of their exact words: "Without possessing the property of activity against bacteria to a very high degree, the disinfectant is no disinfectant. Its action must be prompt and sure." "The bacteriological method has undoubtedly furnished very important and valuable results, but is of little use unless supported by practical experience." "Chemical methods are more reliable if the germicidal power of the various chemicals contained in the disinfectants are once known." I should think there is nothing in these statements Messrs. Newton, Chambers and Co. would find any scruple in subscribing to even at this date.

For my own part I think the Rideal-Walker method of standardising disinfectants will stand a good deal more criticism than it has yet been subjected to. I see no objection to the substitution of milk instead of distilled water, as recently suggested by Mr. Winter-Blyth, provided that a standardised milk be employed.

A committee of experts are at present considering the best means of standardising disinfectants, and also what the standard should be. A report by this committee will probably soon be issued, but until then public bodies, in my opinion, would be well advised (in the interest both of efficiency and economy) to be guided in their purchases of disinfectants by the findings of the Rideal-Walker method of standardisation.—Yours faithfully,

THOMAS DIVINE, M.D., D.P.H., F.C.S.

Huddersfield, February 4, 1907.

THE return issued on Saturday last giving the statistics of pauperism during the last quarter in 1906, shows a rather lower figure than in 1905; the figures supplied by the Local Government Board being 22.7 in 1906 and 23.3 in 1905 per 1,000 of population. The proportion of people receiving poor relief is now 23.1 per 1,000, as against 23.6 per 1,000 in the previous year. In London there has been a slight diminution in the number of persons relieved throughout the quarter, a result due to the decrease of outdoor paupers.

The Hospital

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CEREBRO-SPINAL MENINGITIS.

THE reports which are being received from various large towns, and particularly from Glasgow and Belfast, afford convincing evidence of the fact that cerebro-spinal meningitis in an epidemic form has managed to gain a foothold in this country. Hitherto it has been a somewhat curious feature in the natural history of the disease that, while occasional cases, and even one or two localised outbreaks, have been reported in Great Britain, there have never been any such extensive epidemic developments as have marked the course of the malady in America and Central Europe. In the absence of any adequate explanation of this apparent immunity, it has long been obvious that no sufficient guarantee of its continuation existed. In view of this, and of the outbreaks of the disease reported from various countries in the course of last year, the Local Government Board was well within its duty in directing the attention of the local health authorities in England and Scotland to the possibilities of epidemics appearing in this country. When commenting on the Board's circular, immediately after its issue, we ventured to urge that a policy of compulsory notification should at once be enforced. That suggestion has been abundantly justified by the subsequent facts, and in large centres, such as Glasgow, where it has been adopted, a considerable body of information has now been collected. This information, unfortunately, does not so far point decisively to any method by which the disease can be either cured or prevented. But, as many experiences have shown, it is only by the systematised collection and study of numerous cases of any disease that the true nature and natural history of the disease can be appreciated, and such appreciation is an essential preliminary to the promotion of the practical measures necessary to protect both the community and the individual. Hence we once again venture to press on all local health authorities their responsibility in this matter, and to suggest that the provisions of the Infectious Diseases (Notification) Act should be immediately applied to cerebro-spinal meningitis in all parts of the country. The official circular issued by the Local Government Board conveyed an intimation that the Board would be prepared to consider applications in this

direction in "special circumstances." With such reports as are coming from the Northern towns we think it may be considered that this condition is fully satisfied, and hence we hope that without further delay compulsory notification will be universally enforced.

It has been suggested that the explanation of the more frequent records of cases of cerebro-spinal fever is to be found, not in a greater prevalence of the disease, but in its more ready recognition as a result of improved methods of diagnosis. This question is discussed in a report recently issued by Dr. Chalmers, Medical Officer of Health for Glasgow, and the facts submitted fully justify, at least in our opinion, the conclusion that such an explanation of the present outbreak is not tenable. Indeed, it may be questioned whether the true proportions of the epidemic are not to some extent concealed by the failure in individual instances to distinguish cerebro-spinal fever from other forms of meningitis. Thus the Glasgow records show, that in 1906, and especially in the latter half of the year, there was a mysterious and gradual increase in the number of deaths certified as due to tubercular meningitis. During the previous five years the deaths from that disease per annum ranged from 237 to 260, with an average of 244; in 1906 the figures were 307. It is impossible to resist the suspicion that some of this increase is probably to be explained by a failure to recognise individual instances of the cerebro-spinal variety of meningitis. And the suspicion is made still stronger when it is announced that the Glasgow returns for 1906 actually include 147 cases of this last-mentioned malady; while in January 1907, 162 further cases were certified. No doubt some of these were proved to be mistaken diagnoses, but such errors are probably fully compensated for by the cases of cerebro-spinal meningitis which were confounded with and registered as examples of other diseases. In regard to this question of diagnosis attention may once more be directed to the value of lumbar puncture. It is easily performed, and, with proper precautions, is entirely safe. What its therapeutic position may be is a matter of uncertainty, but by allowing bacteriological examination of the cerebro-spinal fluid it affords an opportunity for a final and definite

diagnosis, though there is reason to believe that a negative observation is by no means decisive.

From the outbreak at Glasgow it is not, unfortunately, possible to gather much light regarding the method by which infection is spread. Multiple cases in one and the same household have been repeatedly noted, but they have mostly been so closely related in date of onset as to suggest simultaneous infection. A considerable number of cases have occurred among breast-fed infants who, so far as could be traced, had no association with patients

suffering from the disease. Dr. Chalmers suggests a possible relationship between the epidemic and the recent low temperatures, which, by lessening vitality, may, it is suggested, diminish the effective resistance of the tissues to the specific germ. Whether anything more definite emerges from this suggestion or not, it is all to the good that the policy of compulsory notification adopted at Glasgow has brought the disease into the sphere of those who are most competent to study its manifestations and to control its incidence.

THE USE AND ABUSE OF EXERCISE.

THE love of exercise is not inherent in the human adult, though children, like the young of all animals, enjoy playing; with them tissue changes are excessive and beyond their needs, so that they have abundance of superfluous energy. It is otherwise with adults. In these metabolism is either exactly proportional to the needs of the body, or it is insufficient; in the one case the weight remains stationary, in the other it falls. Uncivilised races have enough to do, in obtaining food or withstanding climatic influences, to prevent them feeling the necessity for exercise. It is only since men have thronged into towns and since the multiplication of methods of locomotion have made it cheaper to ride than to walk, that the necessity for regular exercise has become obvious. It does not seem possible to lay down any definite rule as to the amount of exercise required by an individual. Each is a law unto himself, and, more than this, it appears that each generation differs from the preceding in the amount and kind of exercise which is required.

The unbroken traditions of the older university towns, like Oxford and Cambridge, where there has been a residential population somewhat given to writing about itself, tell of the habits of bygone years. At Oxford we know from the diaries of Anthony à Wood and of Thomas Hearne that in the eighteenth century the Masters and Doctors of the university rarely did more than pace the High Street in the afternoon, while in the evening they smoked and drank beer in the ale-houses. In the early part of the nineteenth century the walks, now called "grinds," had become more extended, and it was usual for men to go in groups of two or three as far as Headington or Summer-town or Wolvercote. But there were no boats, or cricket, or football, and not much riding, except such as was necessary to enable a Fellow on a Sunday to reach the neighbouring parish where he was to preach and dine. Yet this *régime* produced men like Manning, Newman, and Keble; and the walks themselves were a power in the formation of the school of thought associated with these names.

They led to conversations and friendly discussions in a manner which has been for ever destroyed by the advent of the bicycle and the motor car. In the present generation the time spent in exercise is shorter than it used to be, but the amount of energy thrown into the shorter time is probably greater than it was formerly.

The physiological object of exercise is to increase the metabolism of the body. Moderate exercise spread over a considerable time leads to growth of the tissues employed, while the waste products are eliminated slowly and efficiently. Excessive exercise, carried to fatigue or compressed into too short a space of time, is bad. It makes a sudden call upon the tissues for which they may be unprepared. They may thus become loaded with the products of their own waste, or the eliminating organs may themselves be insufficient for the extra duties required of them. Many an inflammation of the spinal cord leading to paralysis and death has been traced directly to a long bicycle ride; and the influence of fatigue of the spinal cord in exciting tabes in syphilitic subjects is daily obtaining greater prominence. The cardiac effects of excessive exercise, even in those who have undergone a course of training, are well known, and every boy at a public school is now examined as to his fitness, before he is allowed to take any prominent part in the school games.

It is difficult to forecast what the next generation will cultivate in the shape of exercise. Sport in the form of hunting and shooting will always give opportunity enough to the upper classes in England, but already beagles and coursing, which were the pastimes of the yeoman class, have become as extinct as the yeomen themselves. Cricket, football, and rowing provide an outlet for the high spirits of youth, but there is nothing to take the place of walking for the professional classes and for those whose work keeps them in offices and chambers for long hours. Golf, indeed, has saved the present generation from immediate anxiety as to a sufficiency of exercise, but it is already possible to look forward to a time when even golf links will be too far afield to be reached readily.

ANNOTATIONS.

The Effect of a Warm Climate on the Liver.

IN a lecture delivered at the Polyclinic, Mr. James Cantlie expresses the opinion that too much responsibility is placed on the liver as the cause of various disturbances set up by the influence of tropical climates. At the same time it has to be recognised that such climates do exercise a very distinct influence on the hepatic functions. At first this influence is in the direction of physiological excitement—the liver is found to be increased in size and the hepatic activity is also increased, as is shown by the appearance in the stools of considerable quantities of bile. After some four to eight months the liver decreases in bulk, and soon is found to be actually less than normal; and with this the faces become pale, the bowels constipated, and dyspeptic troubles appear. Now, one of two courses is possible. Either the liver remains small as a typical healthy tropical liver, or it increases in size, and can be recognised on palpation of the abdomen. The former is the normal condition of the liver in the tropics, whilst the enlargement just described is the result of want of exercise, associated very frequently with excess in food or drink. As seen in this country in persons who have been resident in the tropics, it is the small rather than the large liver which is associated with such intestinal disturbances as chronic diarrhoea or sprue. The influence of malaria on the liver is rather a vexed question, but this at least may be said, that an enlargement of the liver unaccompanied by a corresponding change in the spleen cannot be due to malaria. Further, many hepatic disturbances attributed popularly to the "deadly climate" are really due to the excessive use of alcohol.

Municipal Bacteriologists.

THE close and penetrating relationship between bacteriology and the numerous large questions which concern the public health is nowadays a familiar commonplace even to the junior medical student. The rapidity with which this position has been established may be gathered from the fact that when the Sale of Foods and Drugs Act became law in 1875, hardly a suspicion existed that the most serious defects in foods and drugs, as supplied to the public, might be due to the presence of micro-organisms. Hence has arisen a very curious position, as pointed out by Dr. E. C. Bousfield in a recent letter to the *Times*. The provisions of the Act can only be set in motion on the certificate of a "public analyst"; that is, an incriminated article can be condemned, and the vendor summoned to answer for the sale of a substance not of the nature and quality demanded by the purchaser, only when an official appointed as "public analyst" by the local authority has issued a formal report. Now "public analysts," whatever be their virtues, can, at least in the majority of cases, hardly claim to be expert bacteriologists. Therefore they are not usually in a position to condemn, say, a food substance on the ground of bacterial contamination. Take as a concrete example the presence of tubercle bacilli in milk. The recent Report of the Royal Commission

on Tuberculosis will doubtless lead to the careful investigation of milk in this particular direction, and certainly it must be held that milk so contaminated is sold to the prejudice of the purchaser. Yet there may well be difficulty in providing the exact evidence which the law demands as necessary to secure a conviction. Manifestly there must be some modification of this position. The necessary reform appears to be the legal recognition of the expert bacteriologist as an official on whose verdict the local health authorities and the magistrates may take action. Some municipalities have already recognised the value of such an officer; and, indeed, no public health organisation can be considered complete without an appointment of this order.

Babies in Bed.

IN England about 2,000 children are every year suffocated through "overlying," and 600 of these victims of parental carelessness die in London. In Germany such an accident is almost unknown. Dr. Wynn Westcott, in holding an inquest at Hackney on one of these unfortunate infants, remarked on this difference, and attributed it to the fact that in Germany a young child never sleeps in its parents' bed, but in a cot of its own. Here, at least among the poorer classes, the reverse is the rule. It cannot be denied that it is more convenient for the mother to have her baby in her own bed, especially when the child is breast-fed. But herein exactly lies the danger. A weary mother, falling asleep with the baby at her breast, is only too likely to fall over upon it, and the child, not having strength to pull itself away, is suffocated. The thing may happen without the mother being guilty of either drunkenness or criminal intent, though often enough there is ground for suspecting one or other of these factors. But it is so very rarely that either can be proved that the parent can almost certainly count upon escaping with nothing more than a warning to be more careful another time. The obvious remedy is to give the child a cot for itself, but it is doubtful if this will be adopted by the very persons for whom it would be most desirable; and there would be endless explanations about the risk of the child catching cold, or, if a little older, climbing out of the cot and falling on the floor, or in some other way coming to grief. And it must be admitted that when a baby has been accustomed to the warmth of its mother's bed, it does not take kindly to its own cot. To train the child to accept the change would involve one or two sleepless nights for the parents, and in a contest of this kind it is usually the smaller of the opponents who conquers. Perhaps before a change in practice became general it would be necessary to call in the aid of the Law. Law settles the question in Prussia, where it is illegal to have an infant under twelve months old in bed with its parents. It may be difficult to enforce a law like this, but when a child dies in its mother's bed the fact is regarded as a punishable offence, and the risk of punishment acts as a wholesome deterrent. But it is to be hoped that with the spread of health knowledge English mothers will do voluntarily what German ones do from fear.

MEDICAL OPINION AND MOVEMENT.

It is reported that for some months past a special ward has been set apart at the Finsen Light Cure Institute, Copenhagen, for the treatment of diseases of the heart and other organic maladies. Finsen light baths are given to the patients, and a certain amount of success is claimed for the treatment. Professor Finsen is said to have had in view a further extension of the therapeutic effects of his light treatment before his death. No details are as yet to hand as to the actual methods pursued or the results obtained. One would hardly expect that the treatment would have anything but a palliative effect upon those morbid conditions which owe their origin to some definite organic lesion of an internal organ, such as valvular heart disease; but if the treatment can be shown to effect as much as medicinal or other palliative measures, it will deserve the attention of the profession, and will be entitled to rank among the therapeutic means at our command. It is, however, idle to speculate as to the nature of the action of the light upon the condition of the patient until we have received further data from Copenhagen.

SURGEONS are realising more and more the importance of attention to the smallest details, both in operative procedure and also in the general treatment of the patient, in order to secure the most favourable results. This remark applies most especially to abdominal surgery. Mr. Charles A. Morton, F.R.C.S., Professor of Surgery in University College, Bristol, gives several useful hints in an address on the subject. In suppurative conditions of the abdominal cavity the patient should be placed in "Fowler's position"; that is, in the half-sitting position, with the chest propped up by pillows or a bed-rest. This should not be left to the nurse to arrange, unless it is known that she is thoroughly competent by previous experience to carry it out. The patient naturally tends to slip down in the bed away from the support; in order to prevent this, a sling of cloth may be carried round both sides of the body and the buttocks and perineum, and each end attached to the head of the bed. An alternative plan is to place a wooden inclined plane, covered by a pillow, under the bent knees, and attach it to the head of the bed by adjustable cords. Tilting up the lower end of the bed is quite inadequate for the purpose. In most cases this position should be maintained for twenty-four to forty-eight hours, when adhesions should be sufficiently formed to prevent spread of infection to the upper part of the abdomen. Another important detail is to prevent the patient from contracting his sewn-up abdominal muscles. The smallest voluntary effort to raise the shoulders is accompanied by a strong contraction of the abdominal muscles. The patient should therefore be instructed to keep himself quite passive during any attempt to raise him in the bed.

In the address referred to, Mr. C. Morton lays claim to the right of the surgeon, who is called

in to operate upon a patient, to direct the after-treatment of the case. We should hardly have thought that such a claim would be contested. But it is evident from what Mr. Morton has to say on the subject that he has encountered some difficulty in making good his claim. It is not fair to regard a surgeon in the light of a mechanic who is called in simply to execute a piece of manual work. When the surgeon operates he takes a very large share in the responsibility of the case, and his interests and reputation are involved in the subsequent result. Much may depend for that result upon the way in which the case is treated after the operation, and it is only right that he should be consulted and his wishes followed in regard to that treatment. It is not to be expected that the medical attendant who has had charge of the case up to the time of operation will retire altogether in favour of the operating surgeon, unless the patient is removed from his previous surroundings and placed under the care of the surgeon in a nursing home. In private practice, when the patient is operated upon at home, the medical attendant naturally remains in charge of the case; but he should be ready, and we cannot but think that he is usually only too ready to receive advice from the surgeon, and, in fact, to carry out the treatment of the case in accordance with his instructions. Different surgeons evince a varying amount of interest in the subsequent course of their cases, but the majority are willing to make further visits when necessary, independently of any fees; and we believe that such assistance is generally appreciated cordially by the general practitioner.

In a previous issue we referred to Dr. H. D. McCulloch's experiments with *x*-rays, by which he was able to show that their action upon local manifestations of tuberculosis was accompanied by a rise in the opsonic index of the patient. We have since received a communication from him in which he draws our attention to "points of vital importance" in his paper, which we passed over in referring to it. These points to which the author refers are rather questions of hypothesis than of fact. Dr. McCulloch devotes the first part of his paper to a very able consideration of the processes which take place in the body, by which an individual is rendered more or less immune to a given disease. He draws a very plausible and graphic picture of the probable course of events. He can, however, hardly lay claim to originality for the picture. It is the "working hypothesis" of bacteriologists of the present day, and on that account chiefly we did not think any special reference to this part of the paper necessary. We recognise that it is unsatisfactory for an author to find only one half of his ideas reported or represented, but in this case we confined ourselves to the practical observation that the action of *x*-rays was accompanied by changes in the opsonic index of a tubercular patient and indicated the manner in which Dr. McCulloch suggested these changes were brought about.

HOSPITAL CLINICS.

SOME AFFECTIONS OF THE HEART CONNECTED WITH SUDDEN DEATH

By THEODORE FISHER, M.D., M.R.C.P.

MEDICAL men are often called upon to investigate the cause of death in some person who has fallen dead in the street, or has died suddenly when engaged in some quiet occupation at home, or possibly has been found dead in bed. If we are to believe the reports of inquests published in the newspapers, there appears occasionally to be considerable uncertainty in the mind of the medical witness as to the exact cause of death.

In making such a remark it is not intended to convey the idea that sympathy is felt with those who maintain that all post-mortem examinations requiring public inquiry should be made by a medical man who has had special experience of post-mortem work. Although I have been present at about 2,500 autopsies, such experience would not by any means enable me to assign definitely the cause of death in every case apart from some knowledge of signs or symptoms of disease which may have existed during life. While, however, I feel that evidence should be given regarding the presence or absence of signs of disease during life, it seems to me also that many medical men who are required by law to ascertain the cause of death from post-mortem appearances, frequently need a more accurate knowledge of these appearances. Such an opinion is not expressed without having come into contact with those who give evidence as to the cause of death. In hospitals it is the medically qualified residents who are the expert witnesses in coroner's courts. They are generally fresh from some large medical school, are well trained in nearly every branch of medicine and surgery, yet their ability to recognise appearances of simple character in connection with morbid anatomy is often lacking.

When we speak of sudden death, both medical men and those without medical training, generally think at once of the heart. And it is needless to say that they are right to regard it as all-important to the maintenance of life. In passing, it may be remarked that formerly, in reports of inquests in the daily papers—and occasionally I think it is so still—apoplexy is mentioned as a cause of sudden death. Absolutely sudden death from such a cause, however, is extremely rare. It is necessary to remember that cardiac action is virtually independent of the brain. The emotions of the mind acting through the brain may disturb the heart's rhythm, and such impulses may temporarily, or in very rare instances even permanently, arrest cardiac action. Yet the brain itself is not responsible for the steady continuance of cardiac systole and diastole, as it is for the respiratory movement of the chest; and consequently if an acute lesion of the brain is to produce sudden death, it must either cause it by shock or by injuring the respiratory centre. Should respiration cease, cardiac action, it is needless to say, will soon also cease from want of aëration of the blood which flows through the coronary arteries.

The most common causes of arrest of cardiac action arise not without the heart, but within it. In connection with these causes arising within the heart, however, there are possible fallacies. Perhaps the most common is the importance attached to what is called fatty degeneration of the heart. Again, although the words "mitral regurgitation" are not often used in coroner's courts, this morbid condition is another stumbling-block. Mitral regurgitation, it is true, is not considered to be a common cause of sudden death, yet the importance of regurgitation through the mitral orifice, as a disease, is deeply ingrained in the minds of most of us; and this mental attitude affects the way those of little experience examine a heart in which they expect to find the cause of death. There being no fatty degeneration of the cardiac muscle that they can detect, and no disease of the aortic valve, they examine the cusps of the mitral valve, and almost invariably succeed in discovering something abnormal which they consider sufficient to account for death. The most common error will be referred to later, but it may not be out of place briefly to refer to the size of the mitral orifice. Some students appear to be taught that the mitral orifice normally admits the tips of two fingers. It is scarcely necessary to remark that the tips of fingers differ much in size; yet when we consider how the height and weight of the human body varies, the size of the normal mitral orifice is remarkably constant. It ranges only very slightly above and below 4 inches in circumference. Two of my own finger-tips measure about $3\frac{1}{2}$ inches, whereas three finger-tips measure exactly 4 inches. Three finger-tips are frequently stated—and it seems to me are more correctly stated than two—to be a gauge of the size of a normal mitral orifice.

Probably, however, few of those inexperienced in post-mortem work lay stress upon evidence of dilatation of the mitral orifice as measured by the finger-tips. There is a much more common source of error. This error is the discovery of a thickened edge to the mitral valve. The expression "edge of mitral valve thickened" is a familiar one, and the reason why such thickening is so often thought to be present and to be the consequence of disease is because one feature of the anatomy of the mitral valve is not sufficiently borne in mind. The cusps of the mitral valve are composed of layers of endocardium covering strands of fibrous tissue, and the point to which I wish to draw attention is that these fibrous strands are prolongations of the chordæ tendineæ. The chordæ tendineæ, on becoming inserted into the flaps of the mitral valve, become minutely subdivided, and their fibres interlace in their course towards the mitral ring at the base of the flaps. The interlacing of these fibres occurs chiefly just above the margin of the valve,

and in the situation of this interlacing there is a band of thickening. During the process of examination of the heart this thickening is often made to appear greater than it really is. In examination of the heart, in order to obtain a good view of the flaps of the mitral valve, not only is the left ventricle laid open, but the mitral orifice is divided between the flaps, without, however, severing the connections of the chordæ tendineæ with the muscular pillars. Whether the heart is then held in the hand or is placed on the post-mortem table, abnormal tension is placed on some of the chordæ tendineæ, and this tension causes puckering of the edge of the large flap of the mitral valve. Let this flap, however, be held up against the light, that is so that the light is seen through it, and all the apparent thickening and abnormal puckering will resolve themselves into the normal structure of the valve. The course of the divided fibres of the chordæ tendineæ will then be clearly seen, and the part the fibres play in producing the thickening which is normally present be made evident.

Having indicated a mistake that is to be avoided, we may next consider in what way inflammation affects the mitral valve. The early evidences of inflammation, it is needless to remark, are small vegetations over the position of contact of the edges of the flaps. These are, however, in cases of rheumatic endocarditis of no importance in themselves. If inflammation were limited to the site of the vegetations, endocarditis would not be followed by serious consequences. Unfortunately the inflammation extends far more widely in too many instances, and does not end with the attack of rheumatic fever in the course of which it originated. The inflammation generally affects the fibrous structures of the chordæ tendineæ from their origin at the apices of the musculi papillares to their insertion into the ring at the base of the flaps of the mitral valve. This inflammation is also often progressive. The continued movement of the valve probably acts as a source of irritation to the formation of new fibrous tissue. This fibrous tissue contracts, but does not produce puckering of the mitral valve. Puckering is a sequel of irregular inflammation. The inflammation which succeeds rheumatic endocarditis spreads over the whole of the mitral flaps and along the chordæ tendineæ connected with them. Inflammation of more irregular character may occur in association with infective endocarditis. This form of endocarditis is not by any means always acute; it is sometimes of long duration, and may heal in one place while it spreads in another. As a consequence of such local healing, I have seen very definite puckering produced. But to return to rheumatic endocarditis, the newly-formed fibrous tissue in the chordæ tendineæ and in the valve contracts, and contracts uniformly, with the resulting effect that the edges of the flaps are drawn downwards towards the apex of the ventricle and inwards towards one another.

The difference in length and thickness of the chordæ tendineæ in the early and late stages of rheumatic endocarditis will be made evident by a reference to the accompanying photographs.

Fig. 1 shows rheumatic vegetations, which, it may be remarked in passing, are unusually large for vegetations of rheumatic origin; but the



FIG. 1.—EARLY RHEUMATIC DISEASE OF THE MITRAL VALVE SHOWING THE CHORDÆ TENDINEÆ FREE FROM THICKENING.

The letter F is placed just above the line of attachment of the lesser flap of the mitral valve, and points by a dotted line to the larger flap. The letter C is placed on chordæ tendineæ, passing to the lesser flap, and the letter T is situated on the chordæ tendineæ attached to half of the margin of the larger flap.

chordæ tendineæ are little, if in any degree, thickened. Fig. 2 shows the large flap of the mitral valve drawn down until it is in contact with one of the muscular pillars, and the contraction of fibrous tissue which has produced this has caused the disappearance of some of the chordæ tendineæ. These features of inflammation of the mitral valve are apparently not widely recognised, and it seems that teachers of medicine often speak as if unaware of the important part played by the chordæ tendineæ in disease of the mitral valve. It is not too much to say that *rheumatic disease of the mitral valve is mainly a disease of the chordæ tendineæ*. It has previously been mentioned that the contraction of the chordæ tendineæ draws the flaps of the mitral valve downwards and inwards towards one another—in other words, it produces a narrowing of the orifice, or what we know as mitral stenosis. The flaps are, however, generally prevented from closing efficiently, and regurgitation through the orifice is also therefore present. During life the regurgitant murmur alone may attract attention, where after death the most important condition found proves to be mitral stenosis. We may with safety make another statement, and say that when in a case of sudden death *there is no evidence of stenosis of the mitral orifice, any abnormality of the mitral orifice that may be found has probably had little or nothing to do with the cause of death*. Although such a strong statement may not be found elsewhere, yet it can be made with considerable assurance, and I hope its apparent unreasonableness will disappear when we deal with disease of the cardiac muscle. It is necessary, however, to add that uncomplicated mitral stenosis is a very rare cause of sudden death.

Although sudden death as a consequence of uncomplicated mitral regurgitation may be said not to exist, there are exceptions or, at least, apparent exceptions. It has fallen to my lot to make a post-mortem examination upon one case, and one case only, where it appeared that mitral regurgitation due to some disease of the mitral valve was the cause of sudden death. The case to which I refer occurred in a young man whom I happened to meet during life under what must be considered, in the light of what happened after, somewhat curious circumstances. He called one afternoon in a cab, asking whether, since the medical attendant of the family was out, I would go to see a girl who had attended hospital as an out-patient under my care, and had, on the afternoon of his call, been taken suddenly ill. I went, but on arrival found the girl was dead. The young fellow, I learned, was engaged to be married to the girl, and the shock of the news of her death brought on, soon after our arrival, an attack of dyspnoea. It appeared that he had suffered from rheumatic fever, which, his medical attendant had told him, had affected his heart. A few months later the body of a young man, who had died suddenly when running to catch a tramcar, was on the post-mortem table. I at once recognised the corpse as that of the young man who had called to fetch me to see his dying fiancée. On examining his heart little evidence of disease was found. There was nothing abnormal visible to the naked eye in the cardiac muscle; the segments of the aortic and mitral valves were healthy; and although some thickening of the chordæ tendineæ and of the flaps

interferes with the nutrition of the cardiac muscle without producing abnormal appearances that can be recognised by the naked eye or even sometimes by the microscope. Occasionally, it may be remarked, such naked-eye or microscopical lesions are very evident, but there are other cases in which it appears that the cardiac muscle must have been at fault, where no very definite evidence of disease can be detected. In such a case as that just related, where there was only trifling valvular disease, it seems reasonable to conclude that the muscular wall of the heart must have been weakened in a way that rendered it liable to sudden arrest of action during strain. Some people who have had rheumatism, although no murmurs indicative of valvular disease are audible, are liable to attacks of dyspnoea, which may be accompanied by pain. In the subjects of these attacks a sudden fright or a slighter cause, such as some annoyance, may start the dyspnoea. This association of dyspnoeic attacks with a definite exciting cause may lead the friends or medical attendant to consider the outbursts to be nothing but hysteria. It will have been noticed, however, that shock brought on an attack of dyspnoea in the above-mentioned young man, and that something more than hysteria was present is evident in that he died suddenly. Yet, although in his case there was a fatal ending, I do not think attacks of dyspnoea following rheumatism, at least when there is no evidence of valvular disease, are usually of serious import; but in order to express a very definite opinion upon such a point, cases would need to have been watched for many years. In connection with the above case it may be interesting to mention that it is within the bounds of possibility that the nervous shock weakened the heart. It seems to me that shock can definitely weaken the heart for a considerable time. Several cases of this nature have come under my notice.

In one instance a girl, aged 21, was introduced by a lodging-house keeper, either through some strange misunderstanding or from astonishing and callous thoughtlessness, into a bedroom where the young man to whom she was engaged was lying dead. The girl knew he was ill, but apparently, when she entered the room, was not even aware that he had been in any great danger. The sudden shock of learning the truth in this cruel manner produced so much disturbance of the heart that she was unable to leave the house for two hours, at the end of which time, by the aid of a friend, she was taken home. The following day, dyspnoea and cardiac pain returned. When she came under my notice, several months later, she was still subject to these attacks, and, when walking fast or going upstairs, she suffered from breathlessness. I have met with similar cases following such incidents as the presence of burglars in a house, the jumping of a large dog on to the patient's back, and after seeing a relative fall down in an epileptic fit. In one of these cases swelling of the legs was associated with the symptoms of cardiac weakness. This seems to show that, in this case at least, there was something more than a neurosis. It is easy to consider any morbid condition that appears obscure to be purely functional, and although it may be



FIG. 2.—RHEUMATIC DISEASE OF THE MITRAL VALVE OF LONG-STANDING, SHOWING GREAT SHORTENING OF THE CHORDÆ TENDINEÆ.

The letter F is placed on the large flap of the mitral valve. Immediately below some of the chordæ tendineæ have entirely disappeared.

of the valve existed, and some regurgitation had no doubt been present, there was nothing that could have interfered seriously with the mechanical action of the heart.

It seems to me that rheumatism not uncommonly

tempting to take this view of weakness of the heart following fright, it seems to me to be possible that unusually strong impulses, such as must occur in exceptional conditions of nervous shock, may affect the nutrition of the heart, just as some progressive lesions of the central nervous system appear occasionally to originate in a peripheral injury. It is interesting to note in this connection that there are recorded cases of death some days after a severe shock has been received. A pathetic instance is the death of Vanessa, who is said to have died a week after Swift had angrily, in person, returned the letter she had written to Stella.

We are, however, wandering somewhat from the question of sudden death associated with lesions of the mitral valve. It has been previously mentioned that sudden death associated with definite disease of the valve is rare, and that where such death occurs it does not necessarily follow that the disease of the valve has been mainly responsible for the fatal issue. We have only lightly touched upon the importance of the cardiac muscle, but it may be mentioned here that fibroid patches, possibly as large as the little finger-nail, are sometimes found in cases of death from mitral stenosis. Cases of death by slow cardiac failure are now referred to;

but it is in cases in which such patches are present that sudden death would be most likely to occur. I do not happen to have had to investigate a case of sudden death from mitral stenosis, so that my own personal experience can only indicate probabilities. Something further will need to be said about the mitral orifices when sudden death associated with affections of the cardiac muscle is considered; but in closing these remarks upon disease of the cusps of the valve, it may be interesting to give an illustration of the apparently small inconvenience a serious lesion of the mitral valve may occasion even to a strenuous life. In a man, aged 65, who had died of bronchitis, I found a mitral valve greatly thickened, and so stenosed that it only admitted the tip of one finger. On inquiry it was ascertained that the man had suffered from five attacks of rheumatic fever during the course of his life, yet apparently was unconscious of anything having been wrong with his heart. He had lived an active life as a horse trainer until within a few weeks of his death. It is needless to remark, however, that instances of this character are not frequently met with. The majority of those affected with mitral stenosis die between the ages of 30 and 40 years.

POINTS IN TREATMENT.

NUTRIENT ENEMATA.

RECTAL feeding must necessarily mean partial starvation of the patient, for it is not possible for the rectum and colon to absorb enough foodstuffs in 24 hours to supply the minimum number of calories required by the body in that time. Nevertheless there are circumstances in which it is impossible to feed by the mouth, and rectal feeding is resorted to as being better than no feeding at all. It has even been found possible to maintain life by nutrient enemata over periods of six weeks or more at a stretch. When rectal feeding becomes necessary, it is most important to give such enemata as will be most easily absorbed, whilst at the same time affording as large as possible a supply of calories of energy to the patient.

A healthy man, at rest in bed, requires something like 3,000 calories per diem to maintain his strength and weight; a sick man, in whom metabolism as a whole is below par, will probably not lose strength if the food he absorbs can yield 2,000 calories per diem; a woman may do with even less; perhaps as little as 1,500 calories per diem may suffice to prevent loss of weight and strength, though they would not allow of any gain in weight except under exceptional circumstances.

If 1,000 to 1,500 calories be the least amount of energy that the absorbed food must yield in order to maintain a patient even at a low ebb, the question arises: To what extent can this be supplied per rectum? It is clear that *nutrient suppositories* are practically useless. The total amount of energy they contain is almost negligible, and to give them as a food is to disturb the patient without feeding him at all.

A very usual nutrient enema consists of the yolk of one egg, a little salt, and peptonised milk to four or five ounces. Let us see how much energy this enema contains:—

| | | Calories. |
|------------------------|----------------------------------|-----------|
| Yolk of 1 egg | Proteid, 38 grains or 2.5 grams | = 10.0 |
| | Fat, 51. or 4.5 grams | = 40.5 |
| Peptonised milk 4 ozs. | Proteid, 5ss. or 2 grams | = 8.0 |
| | Fat, 45 grains or 3 grams | = 27.0 |
| Salt 2 grams | Carbohydrate, 75 grs. or 5 grams | = 20.0 |
| | | 105.5 |

It would be necessary to give between 14 and 15 of these a day to supply 1,500 calories, even supposing the whole of each was absorbed. It is seldom possible to give more than six a day—i.e. one every four hours, so that the energy supply will not reach 650 calories.

This being so, it will at once occur to one that the amount in each enema should be increased. The question of how best to increase it is the difficulty. There are many obstacles in the way. In the first place, the rectum will not retain more than a certain volume of fluid at a time; and in the next, absorption of other things than salt and water is so slow that the first enema will not have been absorbed before the next is due, if the bulk exceeds a certain maximum. The bigger the enema the less often can it be given. If, however, large enemata at longer intervals will do as well as smaller ones more frequently, other things being equal, it is right to use the large injections; for the less often the patient has to be disturbed the better. It has been found that 9 oz. enemata can easily be given three times a day, and it is now the general custom to use them in

preference to the 4 to 5 oz. enemata formerly given four-hourly.

This, however, does not supply the patient with more food energy than before. The 9 oz. enema will not be absorbed if they are given more frequently than three times a day. Is it not possible to alter the ingredients of the enema, so that each may yield a larger amount of energy?

It may be asked, why not give more fat, which bulk for bulk yields more than twice as much energy as do either proteid or carbohydrate? Unfortunately the rectum, even under the most favourable circumstances, cannot absorb more than about $\frac{1}{2}$ oz. of fat in 24 hours—i.e. about the quantity contained in the yolks of three eggs. It is therefore useless to put more than one egg yolk into each 9 oz. enema.

In regard to proteid, the peptonised foods of all sorts are well assimilated, but their prolonged use usually leads to irritation of the mucous membrane, and consequent non-retention of the enemata after a time. Gelatine, undigested milk, and cooked meats are hardly absorbed at all. Luckily raw meat juice and egg albumen are both absorbed comparatively easily and without being peptonised, and it is upon egg albumen and upon peptonised milk that we rely most for the supply of proteid in rectal feeding. Their rate of absorption, however, is slow, so that it is seldom possible to give more than 50 grams of proteid per diem in this way. For example:—

| | | Total. |
|----------------------------|---------------------------------------|--------------------|
| Whites of 3 eggs | Proteid, 11 grams | 16 grams or 5ss |
| | 5 grams | three times a day. |
| Peptonised milk 9 ozs. | Fat, 3 grams or 45 grains. | |
| | Carbohydrate, 11 grams or 165 grains. | |
| Salt 3 grams or 45 grains. | | |

It is upon carbohydrates that one must chiefly rely in increasing the calorie energy of the food supply in rectal feeding. Starch is the best form in which to give it. Cane sugar is not good because it is absorbed unchanged. Dextrose can only be absorbed in dilute solution, because it has a high osmotic pressure. Starch, on the other hand, is colloid, and has no osmotic pressure; it is well absorbed from the rectum, whether given boiled or unboiled, and it is assimilated. It is easier to give it unboiled, because it does not then render the enema too thick for injection purposes. It can be added to any other form of enema that may be chosen, and the constituents of the enemata can be varied from time to time in a given case according to circumstances, but the relative heat values of any given enema forms the best criterion of their relative usefulness, provided each is retained and absorbed. The following are the comparative heat values of two 9 oz. enemata:—

Egg and Milk Enema.

| | | Calories. |
|------------------------|--------------------------------------|-----------|
| Whites of 3 eggs | Proteid, 11 grams or 165 grains | =44.0 |
| Yolk of 1 egg | Proteid, 2.5 grams or 38 grains | =10.0 |
| | Fat, 4.5 grams or 68 grains | =40.5 |
| | Proteid, 5 grams or 75 grains | =20.0 |
| Peptonised milk 9 ozs. | Fat, 3 grams or 45 grains | =27.0 |
| | Carbohydrate, 11 grams or 165 grains | =44.0 |
| Salt 45 grains | | 185.5 |

Egg, Milk, and Starch Enema.

| | | Calories. |
|-------------------------|---|-----------|
| Pure starch | Carbohydrate, 60 grams or nearly 2 ozs. | =240.0 |
| Whites of 3 eggs | Proteid, 11 grams or 165 grs. | =44.0 |
| Yolk of 1 egg | Proteid, 2.5 grams or 38 grs. | =10.0 |
| | Fat, 4.5 grams or 68 grains | =40.5 |
| | Proteid, 2.5 grams or 38 grs. | =10.0 |
| Peptonised milk 4½ ozs. | Fat, 1.5 grams or 23 grains | =13.5 |
| | Carbohydrate, 6.8 grams or 100 grains | =26.0 |
| Salt 45 grains | | |
| Water to 9 ozs. | | 384.0 |

The egg, peptonised milk, and starch enema is the better; and if it needs modification in a given case, the part to leave out is the peptonised milk, replacing it with water. Upon three such enemata as the above, the patient will receive 1,152 calories of energy per diem in the food; upon this the loss of weight and strength will be very much slower than it is upon enemata of egg and milk without starch.

In giving the enema, the patient must be lying upon the back, and it is very important that the buttocks should be raised to prevent the fluid from trickling down towards the sphincter ani and causing a desire to defæcate. To raise the buttocks, a pillow laid across the bed beneath them may suffice; or it may be necessary to raise the foot of the bed by blocks. No syringe is required; it is best to use a rather soft rubber œsophageal tube and a funnel. The tube should be filled with the fluid to be injected, at a temperature slightly above that of the body; when all air has been expelled, the tube is clamped, and the lubricated end inserted slowly as high up in the rectum as possible. The clamp is then released, and the fluid is allowed to run in at its own pace, assisted by raising the funnel slightly to a height of about three feet above the anus. It may take a quarter of an hour before the whole of the enema has run in. It is very important that no air should be allowed to get in. When the tube is removed the patient should remain quietly in the hip-raised position for some time afterwards. The slower the injection is given the more certain is it to be retained.

Two other points in connection with rectal feeding are highly important. The first of these is that the patient will receive far too little water if none is given in addition to the three 9 oz. enemata. More water must be given. Comparatively large enemata of normal saline—i.e. 3iss. of common salt to 1 pint of water—can be retained as a rule if given slowly at body temperature; twice a day, separate from the nutrient enemata, 1 pint of normal saline at 100° F. should be administered per rectum. The second point is that the mucous membrane must be kept healthy and clean, and all unabsorbed residues, together with the natural excretion of the bowel, which continues even during starvation, must be removed by means of a large soap and water enema once a day. This evacuant enema may be given with the patient supine, as in the case of the others, but with this difference, that it should be given more quickly and with a syringe; a pint and a half to two pints may be required.

Six times during the 24 hours, therefore, will the patient have to be disturbed. The hours at which

it will be most convenient to do this will vary with the conditions of the patient, the duration of sleep, and so on. It is seldom justifiable to wake a patient on any account. As near as may be, however, it is convenient to start the day by cleansing the bowel with a soap and water enema at 6 A.M.; a 9 oz. nutrient enema of starch, egg, and peptonised milk may be given at 8 A.M.; a pint of normal saline at

noon; a second 9 oz. nutrient enema at 2 P.M.; another pint of normal saline about 6 P.M.; and the third nutrient enema between 8 and 10 P.M. Allowing for non-absorption of part of each enema, the patient will probably assimilate food enough to yield 1,000 calories per diem, that is, enough to prevent more than gradual loss of weight, when feeding by the mouth is temporarily impossible.

POINTS IN DIAGNOSIS.

ANAEMIC VOMITING.

In many young women persistent vomiting after food, associated with pain and hyperæsthesia in the upper left quadrant of the abdomen, is of frequent occurrence. The age of the patients is from fifteen to twenty-five, the greater number of cases being about twenty. Sometimes the patient will tell one that she has kept nothing down for six weeks; and yet a striking feature of most of the cases is that there is no obvious emaciation. The patients now under consideration have had no profuse hæmatemesis, and yet the main difficulty in the diagnosis is to decide whether or not there is a gastric ulcer present. Many of the patients belong to the class of domestic servants, shop-assistants, or nurse-maids. They are all of them more or less anæmic.

In cases of real gastric ulcer the abdominal pain is usually local to the epigastrium or to a spot in the left hypochondrium. In "anæmic vomiting" the pain is much more diffuse, and may indeed extend over almost the whole of the epigastrium and left side of the abdomen. The main point in differentiation between gastric ulcer and anæmic vomiting, however, is the effect of rest in bed upon the ability to retain food. Put the patient to bed, and begin giving full meat diet at once, or after twelve hours' rest in bed. If an ulcer be present, the full diet will continue to cause discomfort, or even acute pain. If the condition be "anæmic vomiting," full diet will be well borne after the patient has been resting for twelve hours. Should the patient get up again within a few days, and particularly if she should try to return to her work, the vomiting after food will come on again immediately, and will be almost as bad when milk only is taken as it would be on full diet. A return to bed will at once enable the patient to take full diet. This ability to take full diet when in bed, whilst vomiting recurs whenever the patient tries to work, suggests that the trouble is not really gastric at all, but rather cardiac. It seems that, owing to the poverty of the blood, the heart muscle readily dilates. With the patient at work, running up and down stairs, and carrying pails, etc., the heart is kept dilated; whereas in bed the temporary dilatation subsides at once. The close relationship between the stomach and the heart is well known, and is readily understood when one remembers that both heart and stomach are supplied by the same nerve, the vagus. Vomiting is often

troublesome in cardiac valvular disease with failing compensation; flatulent dyspepsia readily produces cardiac symptoms in the form of palpitations. The relationship of heart to stomach in these cases of "anæmic vomiting" is not difficult to follow, and treatment must be directed towards the heart and the anæmia rather than the stomach. Rest in bed relieves the heart. Full diet to build up the strength of the patient is then possible, and iron in one form or another, combined with laxatives, will cure the anæmia, which is the primary trouble. The duration of the treatment in bed will vary with the degree of the anæmia, but it is seldom wise to allow the patient to be up and about in less than three weeks, or the anæmic vomiting will recur.

It is best not to give the iron in the form of pills, for so many of these remain undissolved and often appear in the motions. At first it is well to give one of the milder preparations. A very good form is

R. Misturæ ferri compositæ (B.P.) ... 3j. t.d.s.

and at the end of a week this may be changed for

R. Liquoris ferri perchloridi ... mxxv.
Glycerini ... 3j.
Infusi quassia ad ... 3j. t.d.s.

If the constipation is very severe, magnesium sulphate may be added to one or more of the doses each day; or another good prescription is—

R. Ferri sulphatis ... gr. iv.
Magnesii sulphatis ... gr. xl.
Acidi sulphurici diluti ... mxx.
Aque chloroformi ad ... 3j. t.d.s.

In many cases iron in the above forms may cause indigestion, in which case a very suitable form is

R. Alginoïd iron ... gr. x.

given as *powder*, in cachet, four times a day. It is not soluble in acids, but is dissolved in alkaline media. It therefore remains as powder until it has passed through the pylorus and has reached the pancreatic secretion in the duodenum.

It is almost unnecessary to mention the necessity of using a tooth-brush after each dose of an iron mixture to prevent discolouration of the teeth. The blackening of the teeth by iron is very well known, but it may be quite avoided by the use of a tooth-brush after each dose of the medicine.

INSANITY AS A DEFENCE IN CRIMINAL CASES.

THAT insanity in some of its forms annuls all criminal responsibility is a well-established doctrine of the common law. The courts for many years have differed only as to the degree of insanity necessary to afford a valid defence. Originally only two kinds of insanity seem to have been recognised by English law—idiocy and lunacy. The law, as laid down by Lord Coke and Lord Hale, and adopted by the courts until the beginning of the last century, declared that to absolve a man from responsibility for his criminal acts his insanity must be such as "totally to deprive him of all memory and understanding." This doctrine has been called the "wild beast" theory, as it inflicted upon an insane person convicted of a capital crime the same punishment it accorded to wild beasts, unless it could be shown that he was possessed of more memory and understanding than they have been allotted by nature. This doctrine received a blow from Mr. Erskine in his defence, on the ground of insanity, of one Hadfield, who was indicted in 1800 for shooting at King George III. in Drury Lane Theatre. Erskine's eloquence and logic gained the day and doubtless obtained the first advance in favour of the insane.

Twelve years later, in the case of Bellingham, tried for the murder of Mr. Spencer Perceval, it was held for the first time that in order to convict the prisoner he must be competent to know the difference between right and wrong in the abstract. This, and Hadfield's case, continued to be the law of England for more than thirty years, although the decisions of the courts were not always in exact accordance with the principles there laid down.

In 1843, McNaughten, a Scotchman, shot a Mr. Drummond, whom he believed to be one of a band of persons following him everywhere, blasting his character, and making his life wretched. He had transacted business a short time before the deed, and had shown no obvious symptoms of insanity in his discourse or conduct. He was, however, acquitted on the ground of insanity. This verdict having caused great public alarm and indignation throughout the kingdom, the House of Lords propounded certain questions to the judges, and their answers constitute the present law of England on the subject (*McNaughten's case*, 10 Cl. and Fin. 200). The substance may be thus stated: "To establish a defence on the ground of insanity it must be clearly proved that at the time of committing the act the party accused was labouring under such a defect of reason, from disease of the mind, as not to know the nature or quality of the act he was doing; or, if he did know it, that he was not aware he was doing what was wrong." Here it will be observed, first, that the question of right and wrong in the abstract was renounced; and, secondly, that now the knowledge of right and wrong, as regards the act in question, was held to be the true test. As to partial insanity, or delusion, as it was termed, the judges said: "That if a person was acting under an insane delusion, and was in other respects sane, he must be considered in the same situation as to responsibility as if the facts, with respect to which the delusion exists, were real. That is to say, that the acts of the criminal should be judged as if he had really been in the circumstances he imagined himself to be in. For example, if under the influence of delusion he supposes another man to be in the act of attempting to take his life, and he kills him, as he supposes, in self-defence, he would be exempt from punishment. If his delusion was that the deceased had inflicted an injury upon him in character and fortune and he killed him in revenge for such supposed injury, he would be liable to punishment."

The answers of the judges have also been generally

adopted by the American courts, where, however, there have been many and frequent variations in the application of these answers. Yet it may be said in general, and doubtless it is the common opinion, that on both sides of the Atlantic the test question, in cases where insanity is brought forward as a defence in criminal cases, would be: Did the prisoner, at the time of the commission of the act, have sufficient strength of mind to know the difference between right and wrong in regard to that particular act?

Within the past ten years there has been an important qualification annexed to this ruling in American courts whose opinions are deserving of the highest respect: they have held that not only must the prisoner know the difference between right and wrong as regards the act in question, but also must have sufficient mental power to control the sudden impulses of his own disordered mind. This addition to the rule, as laid down by the English judges, has been of very slow growth, but it is now the well settled law in many of the States.

In Pennsylvania the first decision advancing this doctrine was a case tried in Lycoming county before Chief Justice Lewis. In charging the jury he said, as to "irresistible impulse": "It is not generally admitted in legal tribunals as a species of insanity which relieves from responsibility for crime, and it ought never to be admitted as a defence until it is shown to exist in such violence as to subjugate the intellect, control the will, and render it impossible for the party to do otherwise than yield. Where its existence is fully established this species of insanity relieves from accountability to human laws." He afterwards repeated the same views in his work on criminal law (*Lewis' U.S. Crim. Law*, 484).

In *Commonwealth v. Mosler* (4 Barr. 264), Chief Justice Gibson said: "His insanity must be so great as entirely to destroy his perception of right and wrong; and it is not until that perception is thus destroyed that he ceases to be responsible. It must amount to delusion or hallucination, controlling his will and making his commission of the act, in his apprehension, a duty of overruling necessity. The law is that whether the insanity be general or partial, the degree of it must be so great as to have controlled the will of its subject and to have taken from him the freedom of moral action." And in *State v. Pike* (50 N. H. 441), Judge Doe, another American judge, says: "If the alleged act of the defendant was the act of his mental disease, it was not, in law, his act, and he is no more responsible for it than he would be if it had been the act of his involuntary intoxication, or of another person using the defendant's hand against his utmost resistance. When disease is the propelling, uncontrollable power, the man is as innocent as the weapon—the mental and moral elements are as guiltless as the material. If his mental, moral, and bodily strength is subjugated and pressed to an involuntary service, it is immaterial whether it is done by the disease, or by another, or a brute or any physical force or act of nature set in operation without any fault on his part."

The question now arises: Upon whom rests the burden of proof to show this insanity? Does it devolve upon the prosecution or upon the prisoner? The many varied decisions in the courts of England and the United States render it difficult to present any general rule on the subject. Probably the better established doctrine now is that whenever in the course of the trial evidence is produced showing that the prisoner was of unsound mind, the burden of proof immediately rests on the prosecution to establish the contrary. The onus is first on the prisoner to show that the insanity exists, which being done, it immediately shifts upon

the prosecution, and it is for them to show that it does not exist, or, if it does, that it is not such as would prevent him from knowing and doing the right. For the prosecution must not only prove affirmatively that the prisoner committed the deed, but must also show that he was such a free agent as is necessary in the law to make his act a crime. There are several American decisions which decide that the jury are to be governed by the preponderance of the evidence, and that it is not necessary that insanity should be proven beyond a reasonable doubt.

The English rule, on the contrary, holds that the prisoner must prove his insanity beyond a reasonable doubt. The English rule is also the law in New Jersey, Pennsylvania, and North Carolina. This question as to the existence of the insanity, and, if it does exist, if to a sufficient degree

to relieve the prisoner from punishment, is purely a matter of fact for the jury, and not of law for the court.

This gradual change in the law of insanity has kept even pace with the treatment offered in the asylums to those afflicted with this disease. The monastic doctrine that the insane were possessed with evil spirits, and were to be treated as criminals, held sway for many years after its founders had lost their control over the minds of men. As the true nature of insanity became known and it was found to be a disease needing care and attention, the treatment of those thus diseased and the laws as to their criminal responsibility became more humane, until to-day we find the insane treated with a degree of kindness and consideration that was unknown at the time such celebrated lawyers as Lord Coke and Lord Hale said their criminal responsibility was to be measured with that of the wild beasts, and when Hogarth gave us a representation of the Bedlam of his day.

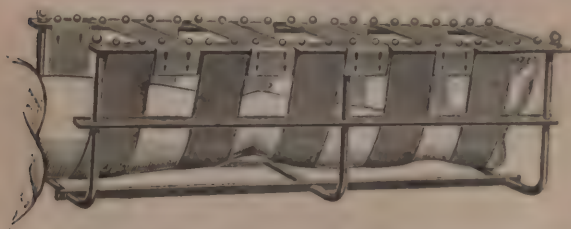
NEW APPLIANCES AND THINGS MEDICAL.

[We shall be glad to receive at our Office, 28 & 29 Southampton Street, Strand, London, W.C., from the manufacturers, specimens of all new preparations and appliances which may be brought out from time to time.]

UNIVERSAL LEG SPLINT AND CRADLE.

(JAS. WOOLLEY, SON AND CO., LIMITED, MANCHESTER.)

A *USEFUL apparatus*, consisting of a combined leg splint and cradle, has been brought before our notice. A good idea of the splint may be gathered from the accompanying illustration. It consists of a galvanised metal frame 32 inches long, 7 inches deep, and 9 inches wide. Along the top on each side is fixed a row of brass studs, which serve to secure a series of ten straps. The straps are each 3 inches wide and are button-holed so as to be adjustable



on the studs to half an inch. They are made of specially prepared waterproof material, and can be sterilised by boiling. The leg is suspended in these straps, and by adjusting these to different lengths of loops the leg can be placed in any position, with the knee flexed or extended and with the foot raised, depressed, or on a level with the thigh. By a careful adjustment of the straps equal support is given to the limb at all points. If alternate straps are buttoned tense across the top of the splint, the splint then acts as a cradle also, and removes all pressure of the bed-clothes from the leg. An adjustable and detachable guard is provided also, in case the foot projects above the splint. Such an apparatus should prove useful in many cases of fracture and other injuries to the leg. The price is £1 10s.

BANANINE BREAD AND BANANINE CREAM COCOA.

(BANANA BREAD, FLOUR, FOOD, LIMITED, 5 NORTH JOHN STREET, LIVERPOOL.)

We have received from the above Company a sample of bananine bread. This bread is made from bananine flour, the latter being derived from the unripe banana fruit. This banana flour, as compared with wheat flour, contains more proteid, fat, and mineral matter, hence from the absolute nutritive standpoint banana flour or meal is more valuable than wheat flour. If, then, we regard these two products

from the money standard, much more nutritive material can be got for a given money unit from banana flour than from wheat flour. In fact, from the economical standpoint we probably have in the banana one of the cheapest forms of nourishment extant. Banana flour or meal possesses certain properties which make it of interest to the medical practitioner, the chief one of which is the laxative action it possesses. This arises from its high content of mineral matter; it roughly contains five times the amount of mineral matter contained in wheat flour. As we all know, brown bread or wholemeal bread has also a distinctly laxative action upon many individuals; this, however, is mostly due not to its mineral constituents, but to the fact that it contains an actual mechanical irritant in the shape of cellulose. This fact is worth noticing in this connection, because it is quite likely that bananine bread may be valuable for its special laxative properties to many patients unable to stand the mechanical irritation of wholemeal or brown bread. The sample of bananine bread which we have had the opportunity of examining is digestible and palatable. The bananine cream cocoa is a cocoa of good aroma, and makes an exceedingly pleasant drink. As *a priori* to be expected, neither the bread nor the cocoa tastes appreciably of bananas, the compound ether to which this fruit owes its taste being volatile, and thus probably driven off in the drying process.

BOOKS RECEIVED.

BAILLIÈRE, TINDALL, AND COX.

"Aids to the Treatment of Diseases of Children." Third Edition. By J. McCaw, M.D.

"Cancer: its Treatment by Modern Methods. By Edmund Owen, Hon. LL.D.

H. K. LEWIS.

"Anæsthetics: their Uses and Administration." By D. W. Buxton, M.D.

J. B. LIPPINCOTT CO.

"International Clinica." Vol. IV. Sixteenth Series.

METHUEN AND CO.

"The Evolution of Life." By H. Charlton Bastian, M.A., M.D.

REBMAN, LTD.

"The Treatment and Prophylaxis of Syphilis." By Alfred Fournier, translated by C. F. Marshall, M.D.

THE SCIENTIFIC PRESS, LTD.

"The Care and Nursing of the Insane." Part I. By P. J. Bailly, M.B.

"Skin Diseases, their Nursing and General Treatment." By G. Norman Meachen, M.D.

"Burdett's Hospitals and Charities," 1907.

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

CURRENT HOSPITAL TOPICS.

Street Ambulances in London.

THE proceedings at the Conference at Gray's Inn on Saturday, an account of which we publish this week, afford the most conclusive evidence of the wisdom of the Home Secretary in appointing a departmental committee to consider the existing provision for street accidents in London. An examination of the various forms of ambulance exhibited on Saturday, being those at present in use, coupled with the fact that the best counsel that the majority of the conference could give was to welcome as adequate to the necessities of the case the addition of 70 police litters to those now available, proves to demonstration that the promoters of that conference are out of touch with public sentiment in this matter. What London needs is one well organised, carefully-thought-out and adequate system dealing with all street accidents, whenever they may occur, in any part of London. We hope, therefore, that the departmental committee, after taking ample evidence, may report to the Home Secretary in favour of such a system and its introduction by the County Council without a moment's avoidable delay. We have always regretted that Mr. H. L. Bischoffsheim's splendid generosity in bearing the whole cost of the existing system of street ambulances for 18 years has met with so little recognition. That system must form the basis on which the new organisation will rest, and Mr. Bischoffsheim's generosity is likely to reduce to a minimum the cost to the ratepayers of a new and perfected system. All honour to Mr. Bischoffsheim and those who have worked with him in lessening the suffering of every Londoner who meets with an accident in the streets of the metropolis.

The Northampton County Hospital.

THE 163rd annual report of this institution is highly creditable to the committee and the secretary-superintendent. It is well written, well printed, full of interesting points, and shows clearly the progress made and the requirements yet to be fulfilled. The information given of the findings of a special committee on the domestic department of the hospital is important. The question of English and foreign meat is dealt with, and although the latter is shown to be cheaper, it has been decided to purchase English meat by preference for the whole establishment. We called attention to the water question dealt with in this report some months ago.

Whilst we agree that every effort should be made to prevent waste, no hospital can be considered well administered which has not an abundant supply of water, and also regulations which afford the maximum of facilities for the use of baths by the staff and the patients. Several hospitals have recently appointed economy committees, and the work of such a committee, apart from its interest, which is considerable, is shown by the fact that at Northampton the direct savings expected to result from the inquiry are at least £300 in the first year, with greater saving in subsequent years. The committee take credit for having introduced the uniform system of accounts, which led to the discovery that there was great waste in the housekeeping department, and so the sub-committee just referred to was appointed. The report contains some illustrations which exhibit the special value of the roomy balconies and of the extensive views they command. There is, further, an excellent illustration of one of the new wards, which will show the expert how exceedingly good and up-to-date these wards are. The Northampton County Hospital, as reconstructed and perfected, may claim to be one of the best, if not the best, of county hospitals. It would facilitate reference if a list of contents were to be included in future reports.

Hospital Accounts and the Financial Year.

THE uniform system of accounts which has recently been overhauled and amplified by a committee of hospital secretaries, under the advice and with the assistance of Mr. J. G. Griffiths, now constitutes the system upon which the accounts of all the best administered British hospitals are kept. The King's Hospital Fund have experienced the difficulty, which all who have to do with hospital statistics come to realise sooner or later, that it is essential that the hospital year of each institution shall end on the same date. The majority of hospitals, like the majority of businesses and private individuals, make up their accounts for the year ending December 31st. There are, however, still some old-fashioned institutions where the financial year is made to end on some other day—i.e., March 31st or June 30th, or September 30th, or even May 31st or October 31st. The King's Fund have now laid down a rule that all hospitals seeking a grant must close their accounts to December 31st in each year. We hope that hospital committees throughout the country will follow this rule, and, where necessary,

give instructions that this shall be the date on which the financial year at their institution must, in future, end. In no other way is it possible for the managers of a large hospital readily to compare its expenditure and working with that of other similar institutions. The new edition of "Burdett's Hospitals and Charities" contains an intimation that in future volumes only those hospitals which make up their accounts to December 31st in each year can be included in the chapters and tables dealing with

hospital income and expenditure. Under this new scheme every one using this book will have, in the tables in question, a reliable list of the most up-to-date hospitals, which are managed on business principles. There has been some competition in the past to secure a place in these chapters, and that competition is likely to become more keen in consequence of the new rule, which should make inclusion even more valuable in the future than it has been in the past.

NEWS AND COMING EVENTS.

THE Duke of Westminster has been re-elected President of the Chester General Infirmary.

A COMMITTEE has been appointed to make arrangements for suitably celebrating the hundredth anniversary of the founding of the Royal Halifax Infirmary.

DR. DONALD MACALISTER, Linacre Reader in Physic in the University of Oxford and President of the General Medical Council, has been elected Principal of the University of Glasgow.

DR. A. H. CARTER has resigned his position as senior physician to the Queen's Hospital, Birmingham, but will continue his duties as lecturer in medicine to the Birmingham University.

THE London Temperance Hospital, Queen Charlotte's Lying-in Hospital, and the Chelsea Hospital for Women have each received a present of twenty pheasants for the patients from his Majesty the King.

THE Committee of Management of the Radcliffe Infirmary, Oxford, has decided to appoint an honorary radiographer to the hospital. The appointment, which is for three years, is limited to qualified practitioners resident in Oxford.

MR. W. A. ADDINSELL, who has recently retired from the post of honorary secretary to the Birmingham Dental Hospital after nearly twenty-five years' active service, has been presented with several pieces of silver plate by the staff and subscribers to the hospital, as a token of their respect and regard.

THE following are the statistics for France given in a recently issued official publication :-

| | 1906. | 1904. | (Averages) 1894-1903. |
|---------------|---------|---------|--------------------------|
| Marriages ... | 308,623 | 290,721 | 292,718 |
| Divorces ... | 10,009 | 9,860 | 7,434 |
| Births ... | 807,291 | 818,229 | 846,246 |
| Deaths ... | 770,171 | 761,203 | 797,001 |

They show at a glance the significant decrease in the birth-rate, unaccompanied by a corresponding decrease in the rate of mortality.

THE annual report of Dr. Niven, medical officer of health for Manchester city, is more than usually interesting on account of the details given of the work done in Manchester in fighting consumption. One-third of all deaths between 15 and 35 years of age were due to phthisis, which is a notifiable disease in Manchester. Dr. Niven deals fully with the important subject of the treatment of discharged consumptives, and pleads for the establishment of a fund from which the family could be assisted "in case the breadwinner is struck down with the disease." He also details the notification scheme. The report is well worth reading by those who are interested in the question of consumption.

THE Pasteur Institute has benefited to the extent of nearly £1,000,000 under the will of a recently deceased French financier.

OBERLEHRER KAMMERER, a prominent representative of German missions, intends to start an institution in Germany on lines similar to those of the Livingstone College.

THE Milroy lectures on Kala-Azar and its epidemiology will be delivered by Major Leonard Rogers, I.M.S., at the Royal College of Physicians, Pall Mall East, on February 21, 26, and 28.

MR. SAMUEL ODAMES, one of Leicester's oldest inhabitants, has given £6,000 to build the first floor of a new wing to the local Infirmary, to be named the Samuel Odames Ward.

THE Hon. Secretary of the Clapham Dispensary states that the Hospital Fund have left the matter of uniform system of accounts for the dispensary to the Hospital Sunday and Saturday Funds.

WE have received the 18th edition of "Burdett's Hospitals and Charities." It contains informative chapters on the misuse of hospitals, hospital finance, and on the progress of hospitals in the United States, besides the usual details and hospital statistics.

THE Jewish Hospital at Leeds, founded and supported by Mr. Jacob Moser in memory of Dr. Herzl, the Zionist leader, has issued its first annual report, which shows that the institution is making satisfactory progress and that it undoubtedly justifies its existence.

ON Tuesday, February 19, the Therapeutical Society will hold its annual ladies' day and conversazione at Apothecaries' Hall, Blackfriars, E.C., at 4.30 p.m. There will be various exhibits, and Dr. Crichton will read a paper on the "Metric System in Prescribing and Dispensing."

BY the will of the late Mr. Richard Todd, of Blythwood, Edgbaston, nine charitable institutions in Birmingham are benefited. Legacies of £400 are left to the General and Queen's Hospitals, while the City Eye Hospital, the Children's Hospital, and the Moseley Convalescent Home receive £200 each. The orthopaedic hospital and the deaf and dumb institution also get bequests.

THE collections on Hospital Sunday in Sheffield this year amounted to only £1,555, while ten years ago the sum raised was almost double. There has been a steady decrease in the collections. The local papers ascribe the smallness of the amount raised this year "to the fact that most people went skating that Sunday," and they question whether January is exactly the month for Hospital Sunday.

STREET AMBULANCES AND ACCIDENTS IN THE METROPOLIS.

AMBULANCES AT PRESENT IN USE IN LONDON.

In view of the fact that a Departmental Committee appointed by the Home Secretary is now considering the existing provisions for dealing with street accidents in London, exceptional interest is attached to a conference of delegates from Metropolitan Boards of Guardians and other authorities held at Gray's Inn on Saturday.

THE AMBULANCES EXHIBITED.

The delegates had an opportunity of inspecting thirty examples of ambulance cars sent by many of the London authorities and societies interested in ambulance work.

The Guardians of St. Olave's have adopted a simple and ingenious appliance for conveying patients down narrow staircases devised by Mr. D. Parkinson, master of Bermondsey Workhouse. It consists of a stout sheet of canvas with button-holed slits for the hands of the bearers, costing from 2s. to 4s. The idea is an excellent one and should recommend itself to all interested in the transport of the sick in large cities. A great number of Boards of Guardians still employ antiquated ambulance cars, that of St. George's being one of the worst. Fulham also has a one horse brougham pattern to do its Poor-law work. Hackney Union adheres to the same type. Lambeth has also an antiquated carriage. Wandsworth Guardians still employ a converted brougham for ambulance purposes. The more modern and up-to-date vehicles for the transport of the sick were represented by that of the Holborn Guardians, built on the most modern principles by the St. John's Ambulance Association. This forms a type of the most modern transport wagons, which many of the other Boards of Guardians have adopted as a model. The Metropolitan Asylums Board exhibited modern types of ambulance wagons in many forms, and the Royal Army Military Ambulance Corps (London Companies) showed a complete equipment of horse ambulance for campaigning purposes. There were two motor ambulances, one from the Metropolitan Asylums Board, and the other built for the Corporation of the City of London. In this ambulance the stretchers are of wood, free from projections and having the minimum of metal-work about them. This is owing to their having continually to be washed with disinfectants which are apt to corrode any metallic parts. An air-bed is placed on the stretcher to minimise vibration and to prevent jolting. It can be readily sponged over with disinfectants. For non-infectious work a mattress and pillow stuffed with the best horse-hair are in use. A specimen of these was shown in the Westminster Union's ambulance. A waterproof sheet is placed on the mattress, and a washable linen cover over all. Ambulances are either of the van or brougham shape. The latter has the disadvantage of being able to carry only a single patient. The van ambulance carries two patients, one above the other. In the latest pattern of the M.A.B. van ambulance the use of lowering gear is obviated by a bed being placed on either side at the seat level. This is more comfortable for the patients and better for the nurse.

The Bischoffsheim Association showed one of the street boxes containing an ambulance litter on wheels, and appliances for first aid. The Electromobile Company, 7 Curzon Street, Mayfair, W., showed a motor ambulance built for the Corporation of the City of London. Wilson and Stockhall, Bury, Lancashire, showed a patent accident ambulance, for one or two horses. This is capable of carrying two patients with an attendant, and has specially patented arrangements for raising and lowering stretchers. The same firm exhibited a patent brougham ambulance for one recumbent patient. The body of this vehicle is hung on patent

rubber ball-bearing springs. Carters, New Cavendish Street, Portland Place, W., had two-wheeled and three-wheeled litters on exhibition. The Metropolitan police brought with them the wheeled litter now in general use.

THE DISCUSSION.

The Lord Mayor said it was impossible to exaggerate the importance, interest, and urgency of the question which had brought them together. Where time was not an element there was no difficulty in obtaining ambulance service, but in emergency cases it was necessary that an ambulance system should be efficient, uncomplicated, and everywhere readily available to the general public. He advised the public to take advantage of first-aid classes, and to avail themselves of the admirable public work instituted by Mr. Bischoffsheim. He did not think these installations were sufficiently advertised. Some notices ought to be fixed to the lamp-posts here and there in the metropolis showing where the nearest Bischoffsheim station could be found. He would like to see in the metropolis a complete modern system combining the maximum of completeness, universality, and efficiency with the minimum of friction, over-lapping, and expense to the ratepayers.

Mr. Thomas Ryan, honorary secretary to the Bischoffsheim ambulance service, gave an account of the Bischoffsheim installation from its establishment in 1889, and mentioned the number of times it had been called into requisition since its establishment. He denounced the four-wheeled cab as a conveyance utterly unsuitable for injured persons. London required first-aid for sufferers and a suitable means of transport. First-aid involved men and a system of training. Transport required the means of locomotion, and men to use it. Wherever in the metropolis an accident happened, especially in its busiest parts, the victims fell first of all into the hands of the police. The Commissioner's latest report showed the number of accidents in the streets in one year to have been 11,860, of which 7,625 were conveyed to hospitals by the police, the remaining 4,478 being dealt with by other persons. The training of the police was not quite satisfactory. The means of transport usually employed was four-wheeled cabs. Occasionally police ambulances were used, but were utterly unsuitable for cases of accident, having been originally designed mainly for the transport of drunkards and incapables. He urged that the hand ambulance of the Bischoffsheim system was an ample provision for street accidents, and could be maintained at an average cost per ambulance of £10 per annum, whereas each horse ambulance cost £200, a sum greatly in excess of any advantage likely to result from its use and that the ambulance services of London could be co-ordinated.

Mr. H. Thompson Lyon, chairman of the ambulance of the Metropolitan Asylums Board, who presided, said that during the next few weeks the Commissioner of Police would place sixty or seventy police litters at the disposal of the public.

RESOLUTIONS ADOPTED.

Several resolutions were moved by Mr. Tasker, who represented the Guardians of St. George's, Hanover Square. They expressed the opinion that an effective service of ambulance could be established and maintained without expense to the ratepayers by co-ordinating and developing already existing services, and by empowering the Poor-law authorities to place the ambulances they possess at the disposal of the public, making a charge in cases where it might be thought advisable. They were eventually declared carried.

CONSTRUCTION NOTES.

THE RADCLIFFE INFIRMARY.

THE reorganisation, reconstruction, and improvement of this hospital, now completed, include the kitchen and the heating apparatus from the central boiler for the operating theatre and the whole of the centre block. The balconies for the outdoor treatment of patients have also been completed, and an x-ray apparatus has been acquired and is now in full working order.

HARROGATE ROYAL BATH HOSPITAL.

DURING the past year a new drainage system has been put down at a cost of £715. Certain additions are, however, not quite complete, and will entail a further expenditure of £180. The whole of the old drains have been taken up, and the new pipes have been laid down in six-inch concrete casing and have been thoroughly tested. The site of the hospital is on reclaimed moorland, on very shifty, peaty subsoil, and the renovation of the drainage system was attended with great difficulties.

BARRED WINDOWS IN POOR-LAW HOSPITALS.

THE Visiting Committee of the Union Hospital at Hope, Salford, recommended that the lavatory windows on the third and second floors should be barred, as a precautionary measure. The recommendation was opposed by a Guardian on the ground that blocks could be so placed as to prevent the window from being opened to a dangerous point. This was again objected to on the ground that it would impede ventilation. To bar up the windows would entail an expenditure of £200, while the blocks would be much cheaper.

THE BRISTOL GENERAL HOSPITAL.

THE new isolation wards of the Bristol General Hospital have just been opened. They comprise an entirely new block, built from plans by Messrs. Oatley and Lawrence. The new block is on the east side of the entrance roadway, and consists of two floors. On each floor there are two wards and one duty room, besides a private, single-bedded ward. The building thus accommodates ten patients. In addition there are nursing quarters, including sitting-rooms. The sanitary arrangements are on an improved plan. A feature of the new wing are the Gilmour patent doors made of wood sections without panels or sinkings, and therefore uniformly smooth. All the woodwork as well as the walls are to be enamelled in white, and the flooring is of the jointless, polished "Eubeolith" pattern. The building is warmed on the low pressure water system, and ventilated by several electric fans. The estimated cost is £11,000, and about £3,000 has been received or promised.

THE WARRINGTON INFIRMARY.

DURING the last decade Warrington has almost doubled its population, and the local infirmary has become far too small. A sum of £11,000 has been raised towards the £15,000 required for its reconstruction. With this sum in hand the Board has decided to commence operations, and the foundation-stone of the new block was laid last week by Lord Lilford. The scheme for the new buildings provides for the erection of a pavilion and nurses' home. The pavilion, which is to be the main extension to the infirmary, is to be three stories high, and will give 66 additional beds. The aspect of the pavilion is due north and south, so that patients will have most of the sunshine on fine days. Each floor is to consist of a single ward, accommodating 22 patients. There will be the usual sanitary additions, and balconies will be provided for the convenience of convalescents. Each ward will have its own kitchen on the same floor, and ample provision has been made for fire exits in the shape of a large fire-escape staircase, to which easy access is obtained from the wards. The building is to be heated by means of a double arrangement of hot-water pipes and open faience stoves with descending flues which will add much to the comfort of the wards. The architects are Messrs. William and Segar Owen, and the contract has been given to Mr. Davenport, of Stockton Heath.

THE LATE PROFESSOR MENDELÉEFF.

ONE of the most celebrated exponents of modern physical science has passed away by the death of Professor Mendeléeff. To medical men his work does not directly appeal, except as an instance of the value of *a priori* reasoning as a guide to the discovery of fact. The name of the great Russian chemist will always be known as that of the enunciator of the so-called periodic law. One of the first fruits of the atomic theory which we owe to Darton was the determination of the atomic weights of all the then known elements. These weights once determined, physicists began to apply themselves to arranging the elements in series, their places being determined by fixed mathematical relationships found to exist between their respective atomic weights. Mendeléeff succeeded in doing this; but in the serial order he suggested for the elements there were several gaps. So convinced was he of the accuracy of his reasoning that he assigned to it the validity of a law, and predicted that future research would demonstrate the existence of elements possessing the atomic weights, and associated chemical properties required by the then hypothetical entities to which he had assigned the vacant places in his series. Precisely what he predicted happened; subsequently elements were actually discovered possessing the above properties, and thus now the gaps in his serial arrangement of the elements are no longer filled by hypothetical but by actual substances.

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For GOUT and RHEUMATISM.

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"Hunyadi János has invariably shown itself an effectual and reliable Aperient, which I recommend to the exclusion of all others. Never gives rise to undesirable symptoms even if used continuously for years."

AVERAGE DOSE.—A wineglassful before breakfast, either pure or diluted with a similar quantity of hot or cold water.

CAUTION.—Note the name "Hunyadi János," the signature of the Proprietor, ANDREAS SAXLEHNER, and the Medaillon, on the Red Centre Part of the Label.

The Hospital

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FUNCTIONAL NERVOUS DISEASE AND THE COURTS OF LAW.

SOME of the possible ill-effects produced on the central nervous system by mechanical violence are almost as readily appreciated by the lay mind as by those who have enjoyed the advantages of a medical education. In an age of vigorous activities and multiple new applications of physical force, there are, unfortunately only too often, many opportunities for observing the disabling and destructive consequences which follow structural damage to the human body, and such a result as paralysis, for example, is widely recognised as a not unnatural issue from, say, a tramcar collision or a railway accident. Most members of the general public are roughly familiar with such an event, and recognise that injuries of this order afford an effective basis in a claim for compensation. As opposed to this, is the position in which injuries are simulated for the purpose of fraudulently establishing such a claim, and when the controversy in an individual case comes into the courts of law, the acute question usually is whether, as a matter of fact, the injuries are actual or pretended. Are the symptoms of which the plaintiff complains real, or are they manufactured for a purpose? If real, do they or do they not mean organic damage to the nervous system? These are the issues presented to the court and jury, and medical evidence is expected to supply simple, confident, and direct answers to the questions in dispute. Now, while there are cases in which special complications and complexities exist, it is not as a rule very difficult for a competent medical practitioner to decide whether there is or is not evidence of organic disease. There are certain definite signs of structural change the existence of which makes possible only a single interpretation, and the absence of these affords an extremely strong presumption in the opposite direction. Thus, to many, it appears as if the whole question of reasonable compensation for injury were contained in the narrowest possible compass.

A very different position, however, comes into view when it is recognised that severe and protracted interference with the functions of motion and sensation may follow the application of violence, even though no appreciable structural damage be inflicted on the nervous system.

Whether the harm is produced through something in the nature of concussion, or as a consequence of mental disturbance, matters not. It is beyond dispute that traumatic neurasthenia exists and that its evidences may include events so eminently suggestive of structural damage to the nerve centres as loss of sensation and of the power of voluntary movement. Here, then, arises the difficulty. Actual damage is comprehensible; malingering is comprehensible; but who shall picture for a jury of laymen a state of matters in which, though extreme symptoms exist, there is neither organic disease on the one hand nor fraud on the other? Such a condition in its essential nature is not readily grasped even by the medical practitioner, and to the lay mind it is apt to appear frankly absurd. It is to be anticipated that, in most instances at all events, the lawyers and laymen who endeavour to dispense justice through our courts of law would make short work of such a doctrine. Yet the doctrine is undoubtedly true, and sooner or later it will have to receive legal countenance and recognition. A patient with, for example, functional hemiplegia as a sequel to, say, a railway accident, is as much the victim of a true paralysis as is a person who suffers from the effects of mechanical pressure on his motor pathway. The prospects of the two conditions may, perhaps, differ widely, and may need to be adjusted by individual balance and argument. But in each there is a real and true paralysis. Given that the two, more or less promptly, follow the application of violence, each may reasonably be described as the result of that violence.

From this it follows, that if such violence has been applied illegally, the person applying it may be held responsible for the paralysis, and this, equally, whether the paralysis be of organic or functional quality. It is not for us to decide what view the lawyers will take of this position; but without question the just definition is that here presented. And what we wish to urge is that medical practitioners shall be prepared to support it in open court. Terms like "hysterical," "malingering," and "functional" are, as the medical profession well knows, not synonymous. And in spite of the risk of misrepresentation, the profession must try

to make the courts of law appreciate the difference. The task will not be an easy one, but justice demands that the attempt be made. In the United States a case has been successfully conducted in which the legal representatives of the plaintiff frankly admitted that the paralysis from which she suffered, as a sequel to a railway accident, was not organic

but functional; and the court awarded heavy damages against the defendant company. Whether a British court will be equally ready to listen to the doctrine of functional disease has yet to be tested. But at the proper time we trust medical witnesses here, as on the other side of the Atlantic, will do their best to secure justice in this matter.

THE PERFECT SURGEON.

THE Hunterian Oration delivered by Mr. Butlin at the Royal College of Surgeons of England on St. Valentine's Day—the anniversary of the birthday of John Hunter—was a model of what should be expected from a modern surgeon of cultivated tastes. It exemplifies at once the weakness and the strength of modern medical education. The weakness is slight and is easily dealt with, though it is common to the whole medical profession. It is neither more nor less than the neglect of medical history which leads the whole profession to ignore the history and work of their great predecessors. Nor have they the excuse alleged by Horace:

*"Vixere fortes ante Agamemnona
Multi; sed omnes illacrymabiles
Urgentur, ignotique longâ
Nocte, carent quia vate sacro"*

(many mighty ones lived before Agamemnon, but they are overwhelmed by everlasting night, unwept and unsung, because they had no sanctified bard). The Dictionary of National Biography contains an ample record of the work of our English surgeons, yet Mr. Butlin confesses frankly that he thought surgery before the time of Hunter was in a deplorable condition, and that he had forgotten Sharp and Pott. He might have added, too, Woodall and Wiseman, the great English surgeons of the Stuarts and the Commonwealth, surgeons who were thoughtful and clear writers, with a deep knowledge of the practical side of their profession. The view taken of the early surgeon is often that of John Earle, the Bishop of Salisbury, who says that a "surgeon differs from a physician as a sore does from a disease, or the sick from those that are not whole; the one distempers you within, the other blisters you without. The rareness of his custom makes him pitiless when it comes: and he holds a patient longer than our Courts a cause."

But great as were Hunter's predecessors, their surgery rested upon the frail foundation of anatomy alone. It was left to Hunter to point out that they who treat diseased bodies should have an intimate acquaintance with the structure and functions of those bodies in health, that they should know, so far as such knowledge is possible, the changes which those bodies undergo in disease and the further changes which they undergo in the progress towards recovery. He

perceived that each part of the body must be studied not only by itself, but in relation to all other parts, and he came to the conclusion that great light might be thrown upon these matters by a study of similar parts in lower animals. For a knowledge of comparative anatomy would not only suggest the meaning of what otherwise might be regarded as meaningless or useless anomalies in man, but would furnish a much better criterion of the relative value of the various organs than could be acquired from their study solely in the human subject. It would be possible, too, to observe on animals the effects of injury and disease which had been deliberately produced, and perhaps to obtain a much clearer notion of the results of treatment than could be obtained in man. Such a course of self-training made Hunter a model surgeon. A perfect surgeon he never was, for to the end he remained rough and uncouth of speech, whilst his contempt for literature showed the lack of early education. But he can be forgiven these deficiencies, for, as Mr. Butlin well says, "The Hunterian oration ought to be delivered at one time by a naturalist, another time by an anatomist, again by a physiologist, and only from time to time by a surgeon. By putting together the lectures delivered by these various specialists, and in that way alone, could a just appreciation of John Hunter be obtained."

Even at the present day a surgeon might do much by educating himself on John Hunter's lines. Too often he is contented with so much biological knowledge as is required by the examining boards at the beginning of his career, whilst his experimental ardour and his zeal for original work is quickly strangled by the cares of many out-patients and much teaching. The time will shortly come when the young hospital surgeon will be relieved of both these trials. There is already evidence that medical students are taught so much that they have no time to think for themselves; and in the near future it is probable that the casualty patients who throng the hospitals will be more carefully sorted, and that their numbers will either be reduced very greatly or that they will wholly disappear, to the mutual advantage of the young surgeon who loses them and the poorer sort of medical practitioner who gains them as patients. The field of medical research is illimitable, and much of it is as yet untilled. Let us hope, therefore, that in the future original investigation of the true Hunterian type will again become a characteristic of the English school of surgeons, as it was at the beginning of the nineteenth century.

ANNOTATIONS.

Nocturnal and Diurnal Sleep.

It is generally recognised that sleep in the daytime is not so refreshing or recuperative as the customary sleep at night. Those who are compelled by reason of their work to reverse their waking and sleeping hours, frequently suffer in health from an inability to obtain the proper length and soundness of sleep during the daytime. It is a question how far this is due to custom or whether there are in addition other factors involved. M. N. Vaschide has made some observations on forty-one subjects, twenty of whom were compelled to work at night and sleep in the day. He finds that sleep in the day is more superficial, less continuous, and less recuperative than night sleep. All the functions of the body—heart, heat, respiratory movements—which are diminished automatically during nocturnal sleep, are liable to disturbances and variations in rate and rhythm in diurnal sleep. Sleep in the day does not reach the depth of nocturnal sleep, except in cases of extreme mental or physical fatigue. The pupil, which is usually contracted in normal deep sleep, is less so in deep sleep during daytime, and dilatation of the pupil excited experimentally is not so evident nor so rapid. Custom only slowly increases the duration of diurnal sleep, but this is especially influenced by complete darkness and silence. As one would naturally suppose, M. Vaschide is led to conclude that there is a close relationship between the darkness of the night and the depth and automatic characteristics of the nocturnal sleep.

The Principalship of Glasgow University.

It will not be questioned that the University of Glasgow has gained, by the appointment of Dr. Donald MacAlister, a highly distinguished and capable Principal. Equally it may be said that the new Principal will find in the University an opportunity worthy of his great abilities. The problems which, under existing conditions, are offered by the Scottish Universities are both numerous and varied, and their solution is likely to demand wise and far-seeing statesmanship. It cannot be questioned that the changes introduced by the last Scottish Universities Commission have had many beneficial effects. At the same time, experience has shown that some modifications are in the highest degree advisable. Indeed, at the present time there is a state of unrest and dissatisfaction which will hardly be allayed except by legislative interference. This in its turn may mean that once again the Universities are to be thrown into the melting-pot, with possibilities that their best friends hardly care to contemplate. In addition to intramural and inter-University questions, there is the position created by the establishment of the Carnegie Trust, which involves many delicate questions of finance. Thus the University of Glasgow may

well be considered fortunate in being able, amidst the present and impending difficulties, to count on the guidance of so experienced a man of affairs as Principal MacAlister. It is not necessary in a medical journal to describe the new Principal's attainments or to remind our readers of the evidence he has given that scholarship does not necessarily exclude business efficiency. Probably the majority of our readers, while not grudging the special claim Glasgow will now have on Dr. MacAlister, will be particularly interested to know that this claim will not prevent the Principal from continuing to act as President of the General Medical Council. There he has already accomplished most excellent work, and the Council has learned from experience to rely on his sane and steady guidance.

Medical Inspection of Schools in Japan.

RECENT events have compelled the whole civilised world to give attention to the achievements, and also to the plans and prospects, of the wonderful island-nation which has almost suddenly leapt into fame. The naval, military, and political organisations of Japan have been the texts for many writers, and have excited widespread wonder and admiration. There has now appeared a careful and exhaustive study of the educational methods favoured by this extraordinary people, and it will, we venture to say, produce an equally stirring sensation. The work has been undertaken by Mr. W. A. Sharp, Professor of Philosophy in the Elphinstone College, Bombay, and it is based on a personal investigation of some 150 institutions and on numerous interviews with individuals of all possible ranks and ages. Considering recent discussions in this country, it is hardly consoling to our national vanity to find that Japan has had a system of medical inspection of schools since 1888. Every child on entering school has to be medically examined, and this examination is repeated at intervals, the medical attendant visiting the school periodically for this purpose. Nor is this all. Arrangements are made for the occasional discussion of questions of personal and domestic hygiene, and these discussions sometimes include the parents as well as the children. The teachers are also expected to take a personal interest in the health of the pupils under their care, and to make regular inquiries on this point. A set of simple rules on the care of the health is given to every child, and these have to be learned and practised. Again, physical training is now compulsory in Japanese education. It includes gymnastics, fencing, wrestling, outdoor sports, and long walks, and, together with these, opportunity is taken to inculcate the moral worth and dignity of such qualities as chivalry, courtesy, unselfishness, and courage. It would seem that in the educational world, as in so many other directions, Japan is, to put it mildly, not a whit behind the Western nations.

MEDICAL OPINION AND MOVEMENT.

DR. CHALMERS WATSON, to whose work on the effects of a meat diet on rats we have already made reference in a previous issue, has evolved a theory, largely based upon this work and the changes he has observed in the thyroids of rats fed on meat, by which he seeks to establish an antagonism between the "gouty" diathesis and the tuberculous diathesis. He suggests that the so-called gouty diathesis is dependent upon an excessive activity of the thyroid gland, and requires a limited supply of meat in the diet. On the other hand, subjects predisposed to tuberculosis are, he supposes, deficient in thyroid activity, and require a liberal diet with a full proportion of proteid. He cites many interesting clinical observations in support of this theory, but the facts hardly warrant any such general conclusions. The work on which Dr. Chalmers Watson is engaged is full of interest, and any glimmer of light which he may succeed in throwing upon the much-vexed questions of diet will be welcome, but too hasty assumptions will not tend to advance any real knowledge on the subject.

UNWRITTEN law is always more liable to transgression than a code in black and white, and may often be broken from ignorance rather than wilfulness. It is well, therefore, that the established customs of the profession in regard to consultations should be definitely and clearly set forth by some responsible authority of the profession. The central ethical committee of the British Medical Association has undertaken this duty, and has drawn up a series of propositions in regard to the ethics of medical consultations, which, if adopted by the Association, should prove a useful code of rules for the guidance of the profession. In these recommendations the various questions, which naturally arise in connection with consultations, are considered in detail: The duty of consultation, choice of consultant, conditions justifying refusal to meet a practitioner in consultation, method of procedure in consultation, and so forth. The committee further enumerates those cases in which it is specially the duty of the practitioner in attendance to endeavour, if possible, to obtain a second opinion. The term "consultant" is defined as the designation of any practitioner who is called in to advise on any particular case, but is not in continuous attendance. The question of a formal recognition of "consultants" as a class of medical practitioners is considered, and advantages resulting therefrom are pointed out, but no definite recommendations are made on the matter.

A SERIOUS difficulty is arising in regard to the ever-increasing number of synthetic drugs which are continually appearing in the market, a certain proportion of which at any rate make good their claim to therapeutic value, and form a necessary part of the physician's armamentarium. These drugs are often highly complex organic compounds, and the systematic names by which they are known to chemists are of such a length as to preclude their use for prescribing purposes. It is necessary, there-

fore, to give them some synonym for practical use, and the manufacturer has the right under the Trade Marks Act to register the name he chooses to apply to the drug. This registration precludes any other maker from supplying the drug under the same name. Such a drug, therefore, usually becomes known by the name registered by the maker first in the field, or by the firm who is most successful in pushing it upon the notice of the profession and the public. Other makers, however, soon follow, but are compelled to adopt another name for the same drug. In consequence there is inevitable confusion from a multiplicity of synonyms. To take an example: urotropine is synonymous with aminotroform, cystamin, cystogen, formin, metramine, urisol, uritone, naphthamine, and vesalvine. In the "Chemists' Annual" for 1906 a glossary of these synonyms is given, and an attempt is made to introduce some uniformity in the nomenclature of these drugs. It is suggested, for instance, that all local anæsthetics shall end in-caine. It is highly necessary that some authority should take upon itself the duty of giving an unregistered synonym to any of these drugs, which become of general utility, so that they may be ordered and prescribed under that name to the exclusion of all other proprietary terms.

THE treatment of rodent ulcer with x-rays has been attended with such favourable success, that it will not readily be abandoned in favour of any other new treatment. Dr. H. Lewis Jones claims to have successfully treated several cases by the application of zinc ions, by means of electrolysis of zinc sulphate solution with the constant current. This treatment has the advantage over x-rays or radium that it is much simpler and requires a less complicated and less expensive apparatus and less technical skill on the part of the operator. He has treated nineteen cases, and, with the exception of five, the results have been successful. Of these five, in one the treatment has been abandoned by the patient, the remaining four are still under treatment, and in only one of these does Dr. Jones appear to have any apprehensions as to the result. The method of procedure was initiated by Dr. S. Leduc of Nantes. An ordinary medical continuous current battery with galvanometer is used. The negative pole is connected with a pad electrode and applied to some convenient part of the patient. The positive pole is connected with a zinc rod covered with a small pad of lint soaked in a 2 per cent. solution of zinc sulphate. This is applied to the ulcer and the current slowly turned on to 5 or 10 milliampères, according to the size of the electrode. In this way zinc ions are carried by the current into the tissues of the ulcer. One application of ten or twelve minutes is in many cases sufficient to effect a cure. In certain cases with induration and outlying nodules Dr. Jones resorts to needling with a zinc needle, and these require more prolonged treatment. The author suggests that there may be a wider field for this form of "ionic" treatment. He has not yet succeeded in finding a suitable medicament for the electrolysis of lupus.

HOSPITAL CLINICS.

CLINICAL LECTURE ON HEART DISEASE IN CHILDREN.

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My remarks will be based upon notes of two cases, widely differing in nature, yet each representing a type of cardiac disease prominent in, and almost exclusively belonging to, childhood.

The first case is that of G. L., 2½ years old, a gipsy child, sent as an out-patient to the Children's Hospital. The family history was unimportant. Since two months of age she had been dusky of complexion and very readily breathless. Recently the abdomen had been painful and, it was said, swollen; of this I found no evidence. After crying, or when she was lying down, the child was very cyanosed and breathless; in addition her fingers were "clubbed." Cardiac pulsation could be seen, and felt, extending from the anterior axillary line on the left, to the mammary line on the right, the maximum point being just to the left of the lower end of the sternum; the cardiac dullness was slightly outside this area in each direction. No thrill was felt. The sounds were dominated by a loud, long, rasping, systolic murmur heard with the greatest intensity over the upper and mid sternum and immediately to its right and left; it followed but did not replace the first sound, and the diastolic part of the cardiac cycle was free from bruit. Respiration and position had no influence upon the signs.

With symptoms beginning only two months from birth this child is clearly the victim of a congenital cardiac defect. Is it any good to try to state the nature of this defect? Sometimes such an attempt is possible and is helpful in prognosis. As about four-fifths of all cases clinically diagnosed as congenital heart disease are cases of pulmonic stenosis, a good way to proceed is to consider a case of congenital heart disease to be one of pulmonic stenosis unless the physical signs are very unlike those we usually find when the pulmonary artery is narrowed, or very like those definitely associated with other defects. In the few cases of pulmonic stenosis of which I have notes, the signs most constantly noted have been cyanosis, enlargement of the heart to the right as well as to the left, and a loud systolic murmur heard all over the præcordium (and often all over the chest), and loudest as a rule over the left upper chest. The only difference in the present case is the point at which the murmur is loudest, and this is not enough to set aside the diagnosis of pulmonic stenosis. Probably the pulmonic orifice is so narrow that blood also escapes from the right ventricle through a patency of the foramen ovale of the septum ventriculorum or of the ductus arteriosus.

The causation of pulmonary stenosis has been much debated; is it due to a purely developmental error, or is it a result of intra-uterine endocarditis? The truth is probably a compromise. Endocarditis

in utero is not merely hypothetical (see Poynton's interesting examples, *British Medical Journal*, 1906, vol. i., p. 1458), but I should think it unlikely that the pulmonary valves are much more often the seat of the inflammation before birth than they are after. Without doubt, on the other hand, the arterial trunk itself may be narrow and even impervious by reason of incomplete development. The aorta and pulmonary artery are developed by division of the arterial bulb into two trunks; this is brought about by the formation of a longitudinal septum growing towards the heart. Sometimes the inter-arterial septum cheats the pulmonary artery, and sometimes (but very rarely) the aorta; the result is a pulmonary stenosis or even atresia. In the Bristol General Hospital Museum, for example, Specimen 252 shows a "pulmonary artery so small as barely to admit a crow-quill; the valve segments form a continuous ring with a central aperture." In specimen 255 the artery is quite impervious, and both ventricles empty into the aorta, the blood from the right ventricle doing so by passing through the space left by incomplete development of the basic portion of the interventricular septum. Further evidence of the developmental factor in congenital heart lesions is seen in the association of such lesions with other germinal defects; thus in a case referred to by me in the *St. Mary's Hospital Gazette* for July 1906, a child, the subject of mongolism and congenital cataract also showed signs of congenital pulmonic stenosis and of dilatation of the colon; and another child I have seen had an incomplete abdominal wall as well as pulmonary obstruction.

The diagnosis of such a case as the present one is not hard, but sometimes a child may be supposed to have a congenital cardiac defect when in reality there is no such thing. Cardio-pulmonary bruits at the basal areas, due to pulmonary fibrosis and collapse, may be misleading; but there are differential points, such as the influence of respiration and position on the signs. Again, over the heart of the very young infant a distinct systolic murmur may be heard, but this usually disappears by the second or third month.

What hope can be given to the parents of this child? Most of the subjects of pulmonic stenosis die before reaching the age of twenty, but not all. I have notes of a man of twenty-one, a porter, admitted to hospital for attacks of giddiness and fainting which had troubled him for a short time. He was dyspnoic and cyanosed, and there were unmistakable signs of pulmonic obstruction. In hospital he had several tetanic attacks, some of them apparently due to strychnine, and others not so easily explained. He improved on the whole and, I believe, went back to work. Another case was that of a woman, 36 years old, with symptoms dating

from early childhood, and signs of pulmonary stenosis; she was admitted with edema of the feet and attacks of precordial pain. She was unable to undertake permanent work after leaving hospital. The very best that can be expected, then, is a life lasting till the third or fourth decade, with more than ordinary care; death is often due to some infection—tuberculosis, malignant endocarditis, and so on. In this particular instance there is such a degree of cyanosis that life is not likely to be long; cyanosis is evidence of deficient aeration of the blood, and its depth is therefore a good index of the degree of difficulty with which blood passes from the heart into the lesser circulation. Polycythæmia is often found (in this case it has not been looked for yet) and represents an attempt on the part of the organism to obviate the oxygen starvation of the tissues consequent on deficient aeration of the blood.

The second case I have chosen from a number of similar ones, because it is a good type of its class. N. H., a girl of nine, was brought to my out-patient department with chorea, the ninth attack; she began to suffer from it at the age of five, and at the same time had aching pains in the feet and ankles which have troubled her on and off since. At six she had an acute illness which, from the mother's description, may have been pericarditis, or pleurisy, or both. She has had many attacks of tonsillitis, and her tonsils are permanently enlarged (this, however, is by no means always the result of repeated inflammations). There was no family history of rheumatism, chorea, or sore throat. Apart from the chorea the only symptoms complained of when I first saw her were shortness of breath on exertion and tired attacks.

"The area of cardiac pulsation is very wide, reaching from the left anterior axillary line to a short distance beyond the right sternal margin in the third and fourth interspaces; the maximum point lies one inch outside the left mammary line in the fifth space. There is no thrill. The impulse is peristaltic in character, appearing first of all at the inner ends of the second and third left spaces, and passing obliquely downwards and outwards to the point of maximum intensity; at the time when the chest wall is being thrust forward at this latter point it is sinking in at the spots where the peristaltic wave started." This sinking in is not the same as the systolic recession described as occurring in cases of adherent pericardium. Another point appreciated by careful palpation is "a diastolic shock in the second left interspace synchronous with the pulmonary second sound. The cardiac dullness is increased transversely in both directions, reaching on either side a finger's breadth beyond the area of pulsation. At the apex the first sound is abnormally loud, ending in a long, blowing systolic murmur transmitted definitely into the axilla. The second sound is very distinctly doubled." Sometimes, in rather more advanced cases, the second half of the second sound is followed by a short, late diastolic murmur; this is not found in the child under consideration. "At the basic areas the systolic bruit is faintly heard, but the most striking alteration is a very great exaggeration of the pulmonary second sound."

Now this account of the physical signs of cardiac disease might apply not only to N. H. but to many other children the subjects of rheumatic infection. The transverse increase in both directions in the area of impulse and of dullness, proves dilatation of both ventricles; that the mitral valve is incompetent is shown by the apical bruit, and the consequence, hypertension in the pulmonary circuit, is attested by the sharp and violent closure of the pulmonic valve.

The peristaltic nature of the ventricular impulse is accounted for by the fact that the heart when dilated is brought into abnormally wide and intimate contact with the chest-wall, so that the normal peristaltic nature of systole is more easily appreciated by the clinical observer. So far, then, we have no sign of anything more than dilatation of both ventricles, sufficient to cause mitral leakage and pulmonary hypertension. Rheumatic infection reaches the heart by way of the coronary arteries. In the pericardium the inflammatory process is characteristically rheumatic; it is marked by periodical recurrences, each of which leaves its permanent result in the form of adhesions. If these are not only intrapericardial, but also mediastinopericardial, certain characteristic signs are produced, which are not present in this case, and the work of the heart is very seriously hampered. These grave cases of adhesive pericarditis are in my experience uncommon, at any rate as far as the rheumatic heart-disease of childhood is concerned. Adhesions which merely obliterate the pericardial sac are of secondary importance. In the myocardium, both parenchyma and stroma are influenced by the infective agent of rheumatism; in the former are found fatty deposit and other dystrophic changes, while the connective tissue shows areas of fibroblastic proliferation and leucocytic infiltration surrounding capillaries. There are signs of infection in the endocardium; within the mitral and aortic valves characteristic nodular swellings are formed, and the endothelium covering these is shed, fibrin being deposited in small quantity on the denuded surface. Very rarely, the inflammation may lead to rapid and unchecked destruction of tissue; the organisms (whatever they may be, probably the micrococcus found independently by various observers) thus find a ready access from the depths of the valve to the blood passing through the heart and scatter themselves and their poisons broadcast through the body. But more often the process is not ulcerative; the nodule disappears, leaving a scar, which is added to by subsequent attacks of inflammation, until, years later, the valves are found converted into hard unyielding plates of fibrous tissue.

In the heart of the child under discussion, where has the principal damage been done by the infection? Clearly not in the pericardium; there is no evidence of pericardial adhesion thick enough to account for the extreme degree of dilatation present. Neither is it to be found in the valves; for in childhood we meet with the beginnings of valvular disease, and it is not till years after the first infection of the cusps that their functions are seriously deranged. No; it is as we might on *a priori* grounds expect. That part of the heart which

is of the greatest importance in health is the myocardium, and therefore an infection attacking all parts of the heart will produce its gravest effects when it interferes with the heart muscle. In the rheumatic carditis of childhood the muscular lesions are of the first importance, and indeed a fatal issue may prove post-mortem to have been due solely and entirely to myocarditis. I have recently made an autopsy upon a child who a few weeks before death was attending the out-patient department with signs closely similar to those we have already found in N.H.; he died, soon after admission, with tricuspid incompetence, probably due to a fresh instalment of myocardial rheumatism which proved "the last straw." Neither pericardium nor endocardium was diseased, but the heart was enlarged and globular in form, and the muscle taken from the apex of the left ventricle showed the evidences of interstitial inflammation. Rheumatic infection of the heart may also kill during childhood by producing (a) ulcerative

endocarditis, (b) pericardial effusion, or (c) pericardial fibrosis; in the first case death is due to general infection, and in the other two to cardiac failure. Since myocarditis is also fatal in the same way as (b) and (c), in any given case of cardiac breakdown in a rheumatic child, the question to decide is whether myocarditis or pericarditis, with its consequences, is the principal factor, and it is safe to say that unless there is very distinct evidence of pericardial inflammatory exudation, of either sort, the heart muscle should be thought of as the more gravely affected tissue. Fortunately, fatal cases are not very common.

As for treatment, there is no space to deal fully with this; yet it may be remarked that the conception of rheumatic infection of the heart being of principal importance in its effects upon the myocardium, should make us insist more strongly than ever upon the tremendous importance of prolonged rest for children thus afflicted.

GENERAL PRACTITIONERS' COLUMN.

ON THE USE OF CLAY IN SURGERY.

By JOHN AIKMAN, M.D. Glasg., Honorary Surgeon, Colonel and Principal Medical Officer, Royal Guernsey Militia; late Surgeon, St. Peter's Port Hospital.

THE United States Pharmacopœia has officially recognised clay in the form of a poultice, and general practitioners in this country are using antiphlogistine as an external application to inflammations unattended by breach of surface. We believe therefore the following interesting contribution from Dr. Aikman, of Guernsey, must prove of practical value in many ways. Dr. Aikman writes: At the outset of the antiseptic system I had the privilege of being a dresser to Lord Lister. Carbolic acid was at that time (1866-7) very impure and did not dissolve readily in water; some of its impurities remained undiluted and had a caustic action on the skin. It occurred to Lord Lister to make a more complete solution in linseed oil, but this was found inconvenient for use. An endeavour was then made to incorporate the carbolic oil with whiting in the form of putty, and some very good results were obtained from the putty, especially in cases of compound fractures and contused wounds. The results in psoas abscess were less favourable. The oily solutions had a strength of 1 in 4, 1 in 7, 1 in 10, 1 in 20, and 1 in 40. In January 1868 the present writer pointed out that the amount of carbolic acid in the putty (which required 5 or 6 parts of whiting for each part of oil) was far below the standard recognised as a reliable antiseptic, and that some other explanation of its authenticated results in compound fracture must be forthcoming. Lord Lister took the suggestion to avizandum and abandoned the putty. The shellac dressing followed, but its principles are outside the immediate subject. Of recent years, by the use of gauze covered by various wools, aseptic or antiseptic, there has been a return to the quietude which

the putty secured. The fact is that the putty, or the gauze and wool dressing, secure rest of the parts and favour the tissues in their struggle to overcome septic invasions when the injured parts can be controlled and kept free from movement by the splint-like action of the dressing. That condition is not present in the case of psoas abscess. Once more it was noticed that the putty became wet, while the skin remained greasy from an exudation of the antiseptic oil from the putty, and the oil held the antiseptic firmly.

Reviewing these observations from the standpoint of the uses of antiphlogistine, and comparing them with some considerable experience of this preparation, I would place in the first rank its use in keeping at rest, and free from infection from the skin, breasts which it is desirable to rid of milk. Put the antiphlogistine on thick, and cover with cotton-wool supported by a bandage. In a day or little more, the breasts are normal if the infant is kept out of the mother's sight. The same condition of rest favours the treatment of boils and carbuncles. Pleuritic effusion is controlled on the same principle, and with the advantage over strapping that the dressing can be removed for the daily examination of the chest. In synovitis of the knee, even with fracture of the patella, the closely-moulded dressing secures additional rest to that afforded by a splint, and it may be left on for a considerable time. I have also used it in inflamed glands. The salicylic acid in the oil of wintergreen is a good antiseptic in cases in which the skin is fairly normal, and does not irritate. Of the other uses of antiphlogistine I have nothing to say; some of those claimed seem to me to be better met by more strenuous means.

SPECIAL ARTICLE.

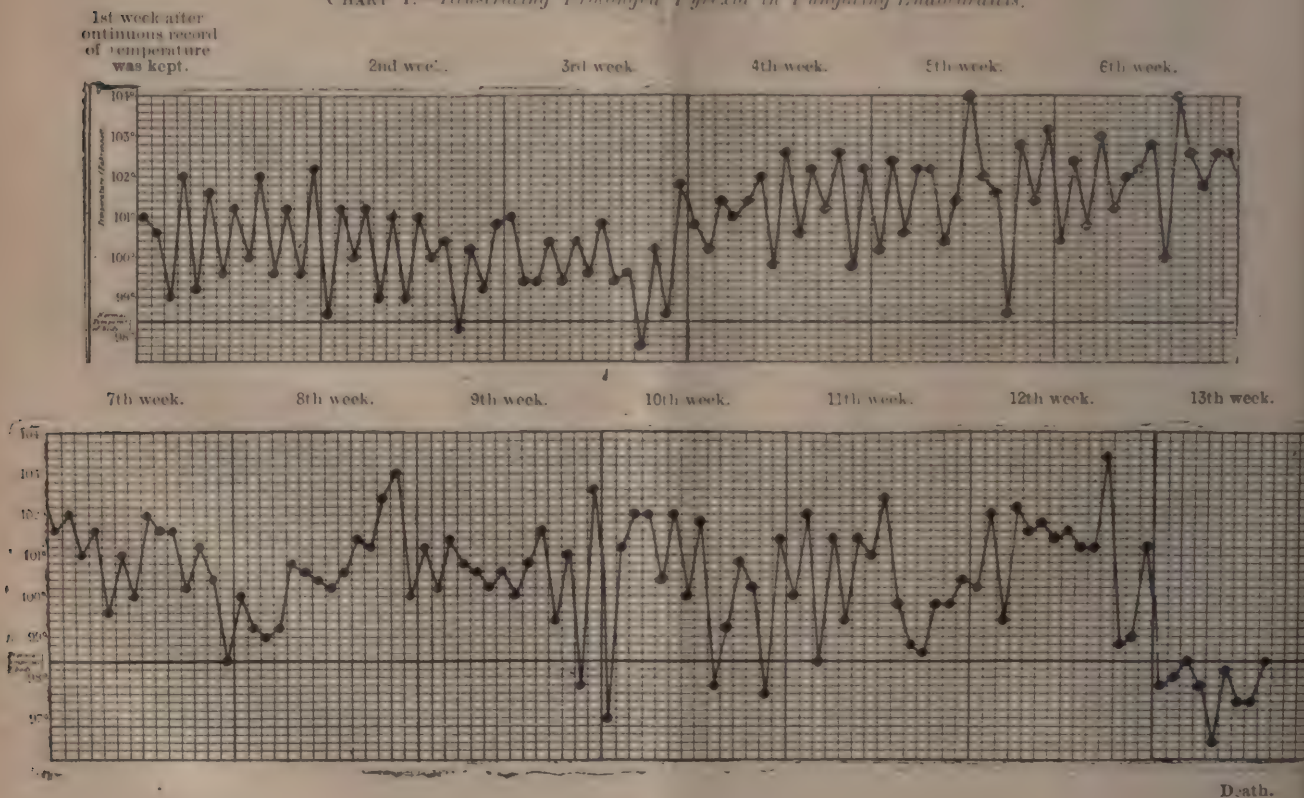
FUNGATING ENDOCARDITIS AND THE POSSIBILITY OF ITS PRESENCE WITHOUT PYREXIA.

THERE is still a widespread belief that all fungating endocarditis cases present well-marked and unmistakable clinical symptoms, and that they may be put into one or other of two main groups, namely: (a) Those which resemble ordinary pyæmia—the *septic* or *pyæmic* type; and (b) those which resemble a prolonged specific fever such as an enterica—the *typhoid* type. This has long been the teaching of text-books; but there is no doubt that both the pyæmic and the typhoid types are much rarer than they used to be; that the majority of cases seen nowadays are not obviously pyæmic; that a minority may resemble typhoid fever; and that the bulk of the cases present most of the features of cardiac disease with failure of compensation, the chief difficulty in diagnosis being to decide whether the failure is purely mechanical or whether there is additional trouble in the form of fungating endocarditis. In short, most of the cases are distinctly *cardiac* in type. The reason why the pyæmic forms are rarer than they used to be is no doubt dependent upon the comparative rarity of pyæmia itself. Antisepsis and asepsis in surgery and gynaecology are to be thanked for this. In former days, when surgical pyæmia was common, numbers of heart-valves showed fungating endocarditis at the autopsy; clinically these cases were for the most part pyæmia pure and simple, the septic endocar-

ditis being a secondary accident which often gave rise to no particular symptoms other than those due to the pyæmia itself. The disappearance of most of these cases is paralleled by the comparative rarity of lardaceous disease nowadays. Formerly, when prolonged suppuration was the rule rather than the exception in surgery, there would be as many as one or two cases of lardaceous disease in the post-mortem room of a large hospital every week; now there may not be an autopsy upon a case of lardaceous disease once in three months in the same hospital, and then it is more likely to be in a case of phthisis than in one of surgical suppuration.

It is true that some cases of fungating endocarditis may be quite anomalous, there being little or nothing to point to cardiac trouble at all. For example, a male patient, aged about 25, recently presented himself, complaining of vomiting blood. At first the condition seemed to be one of gastric ulcer, but on inquiry it was found that he had had recurrent and severe epistaxis on several occasions during the previous three weeks, and on further examination blood was found trickling from both ears, which had long been affected by chronic otitis media. The vomited blood was no doubt partly swallowed, but so much was brought up that part at least must have been gastric. No other site of bleeding was found. There was no pyrexia; an

CHART I.—Illustrating Prolonged Pyrexia in Fungating Endocarditis.



indefinite cardiac bruit was heard; but the spleen was palpable, and the blood-count showed there was no primary blood disease. Upon the strength of three sites of spontaneous hæmorrhage—ears, nose, and stomach—a source for sepsis in the otitis media, a palpable spleen and a cardiac bruit, a diagnosis of fungating endocarditis was hazarded, and ultimately confirmed by autopsy.

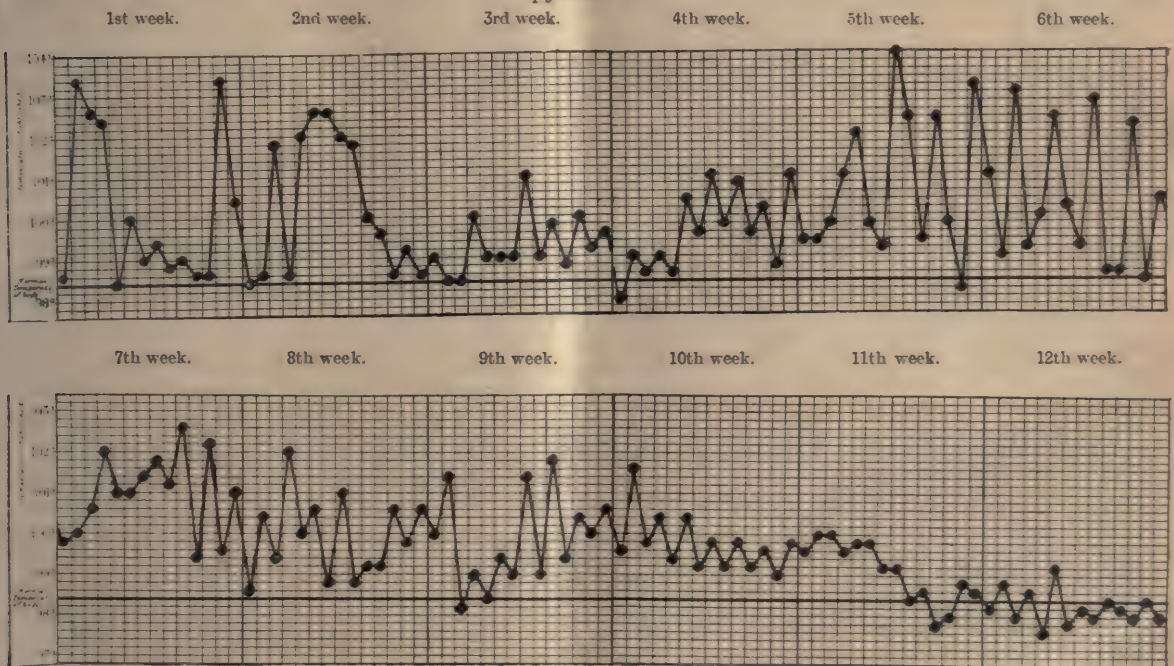
Notwithstanding the occurrence of anomalous cases of this sort, we must repeat that the majority of cases present in the main distinctly cardiac symptoms. Very often there is a clear history of acute rheumatism, chorea, or syphilis to account for an organic valvular lesion; the patient comes up complaining of shortness of breath, pallor, weakness, or oedema; and, supposing the case to be, for example, aortic regurgitation, it is often extremely difficult to say whether the symptoms are due entirely to the mechanical effects of this valve lesion, or whether there is fungating endocarditis as well. Upon what points should one lay stress in deciding the question?

The presence of pyrexia will always arouse suspicion of fungating endocarditis in such a case. If

The patient died; during life the bruits suggested old-standing lesions of both aortic and mitral valves; these were confirmed by autopsy, and upon the top of the chronic valve lesions there were, as was expected, large masses of recent fibrin.

It is, of course, possible for fungating endocarditis to get well; the prognosis is extremely grave, but the possibility of recovery is proved by the occurrence at autopsies from time to time of healed perforations in valves, organised and calcareous masses attached to the free edges of valves, and minute aneurysms on valves. The following is the temperature chart (Chart II.) of a case in which there were bruits indicative of a mitral lesion of rheumatic origin, and in which there were other evidences of fungating endocarditis such as multiple emboli, and enlargement of the spleen, which will be discussed below. Clinically there was no doubt that this patient had fungating endocarditis; life was despaired of for weeks, the illness was so severe, and the cardiac trouble so great; but ultimately complete recovery, with compensation of the mitral lesion, resulted:—

CHART II.—Illustrating the long duration of a case of fungating endocarditis of the cardiac type; with persistent pyrexia.



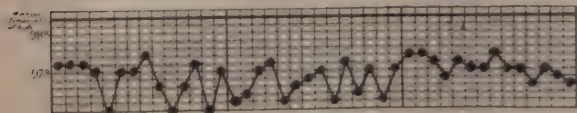
Recovery.

in a case of chronic valvular heart disease there is persistent pyrexia without any obvious cause for it, such as acute pleurisy, tonsillitis, or actual rheumatic fever, there must always be strong suspicion that fungating endocarditis has been superposed upon the fibrotic affection of the valves; sometimes the condition is by no means very virulent, and the end may be long delayed. The following is an example of a case which lasted over four months:—There had been 31 days' definite illness before the record of her temperature was known, and then for 89 days there was almost continuous pyrexia, as shown in Chart I., page 372.

It is important to know, however, that the absence of pyrexia does not exclude the possibility of fungating endocarditis. Presumably the virulence of the organism present varies greatly in different cases, and a less virulent organism is less likely, one supposes, to cause pyrexia than is one which is more virulent. The number of organisms present is also very variable, and presumably there would be less pyrexia if there were fewer organisms. In other words, there are very different degrees in the severity of the affection in different cases. Over and above this, however, there is a factor upon which too little

stress is laid in text-books, and this is that persons suffering from valvular heart disease of long standing are very apt to have persistently subnormal temperatures. The following is a typical temperature chart of such a case, in which the usual temperature was about 97°F . instead of 98.4°F .:—

CHART III.—Illustrating the persistently subnormal temperature in a case of chronic mitral disease.

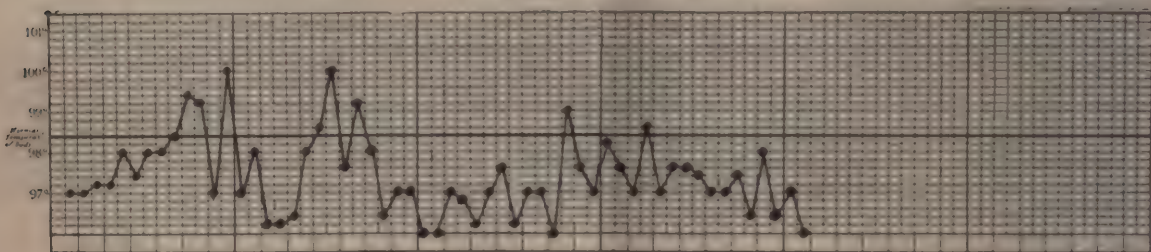


This reduction in the average temperature of many persons suffering from chronic valvular disease is very important; for in the case just mentioned a temperature of 98.4°F . might have attracted no attention, and yet would have been slight pyrexia for this particular patient. A temperature of 99°F . in him would correspond to a temperature of 100.4°F . in a healthy person, and so on. Quite slight degrees of pyrexia in cases of chronic valvular heart disease may therefore be of much greater significance than they are in other people. Chart IV. is an illustration of this: the

CHART IV.—Illustrating the slight degree of pyrexia there may be in a case of chronic valvular disease with terminal fungating endocarditis.

1 week.

1 week.



patient was suffering from aortic disease of long standing, with failure of compensation. At the autopsy there were fungating masses of fibrin on the aortic valves, though the temperature during life had been mostly subnormal. When opportunity arises for recording the temperature in such cases for weeks and months before death it will usually be found that now and then there is definite, even if only slight, pyrexia; but that for many consecutive weeks there may be none at all, is shown by chart V., page 375, from a case of chronic mitral disease, in which the occurrence of emboli, etc., had led to the diagnosis of fungating endocarditis seventeen weeks before it was confirmed by autopsy.

We have entered into the question of pyrexia as a sign of fungating endocarditis at some length, because, although the presence of pyrexia is a very valuable aid in making a positive diagnosis, we wish to make it clear that the absence of pyrexia does not negative this conclusion. It remains to discuss briefly the other symptoms and signs which make one suspect that a patient with chronic valvular disease of the heart has a superimposed fungating endocarditis.

Enlargement of the spleen is a very suspicious

sign. In chronic simple heart disease the spleen, contrary to what might be expected, seldom becomes large enough to be palpable an inch or more below the ribs. In fungating endocarditis, on the other hand, the spleen is almost always palpably enlarged, even if there be no evidence of infarction; whilst with infarction the enlargement may be quite considerable.

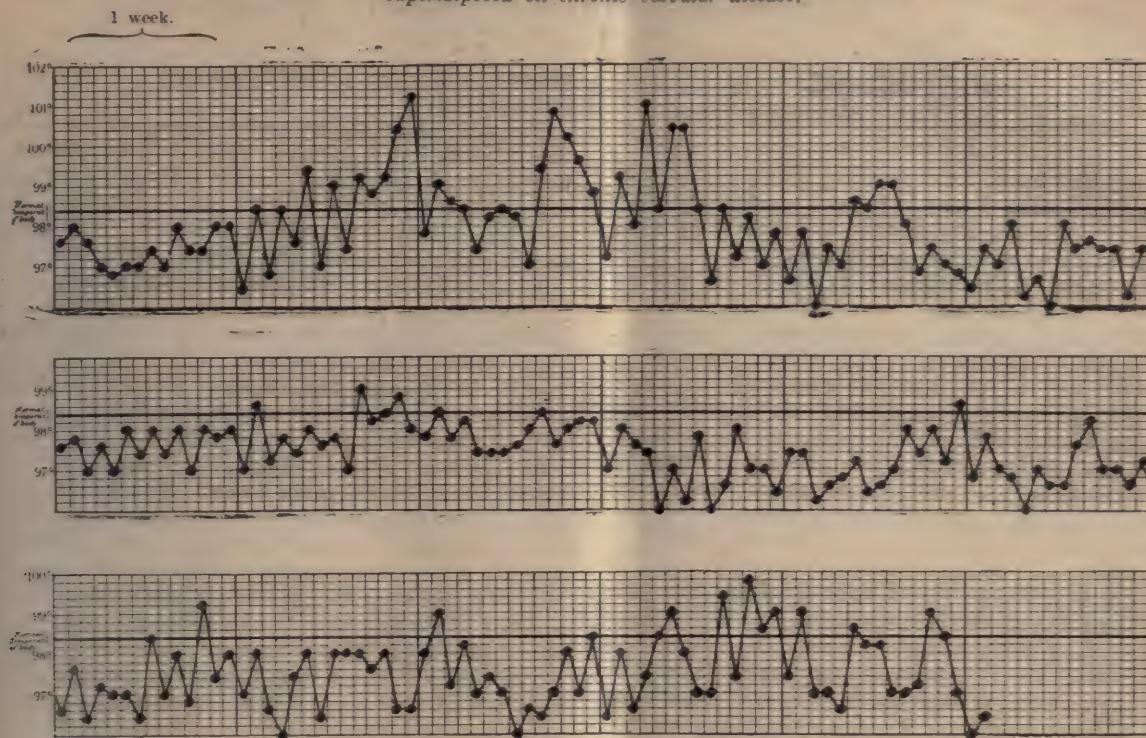
Progressive anæmia is another important sign. This is particularly useful in the case of mitral stenosis, for here, if the heart lesion be "simple," the face is far from anæmic, but is flushed, particularly over the malar bones. Should such a case become progressively anæmic without other obvious cause, such as menorrhagia or the like, fungating endocarditis is more than probable. In aortic cases the sign is of less certain value, because a typical "simple" aortic case is usually anæmic, or at least pale, quite apart from fungating endocarditis.

Multiple emboli in a heart case are a not very uncommon, and almost pathognomic, sign of fungating endocarditis. A single embolus has not the same significance, for it is well known that cerebral embolism, for example, may occur in otherwise uncomplicated, and apparently compensated, cases of mitral stenosis. If, however, a sudden acute pain

over the splenic area should be followed in a day or two by another sudden pain in one loin, and hæmaturia, the evidence of the second embolus succeeding the first so closely would almost certainly prove that the chronic heart case had developed fungations on the valves. Embolism is, of course, by no means restricted to the organs in which infarcts occur; it may take place in the liver, the stomach, the bowel, an upper or lower limb, in a branch of the facial artery, in fact anywhere except the lungs. An infarct in the lungs is seldom evidence of fungating endocarditis, because the fungating masses are so much rarer on the valves of the right side of the heart than they are upon those of the left.

A sudden complete change in the character of the bruit heard is occasionally the first sign that may lead to a suspicion of fungating endocarditis. For example, a man came complaining that his wife could not sleep at night, being kept awake by a musical sound he had in his chest. This was found to be a tremendously loud musical aortic bruit, diastolic in time. The man himself seemed quite well. A few days later the bruit suddenly lost its musical character, and was now barely audible with the

CHART V.—Illustrating absence of pyrexia for weeks at a time in a case known to have fungating endocarditis superimposed on chronic valvular disease.*



stethoscope. So sudden and radical a change in the bruit suggested a sudden and radical change in the condition of the valve; fungating endocarditis seemed to be the only cause which could bring this about so suddenly and apparently spontaneously; the diagnosis was made accordingly, and its correctness was verified at autopsy in due course.

Spontaneous hæmorrhages in a heart case are very suggestive. An instance of this has already been given. It is rare for a simple valvular heart disease to cause hæmorrhages other than hæmoptysis or menorrhagia. Should petechiæ appear under the skin, or blood in the urine, a suspicion of fungating endocarditis at once arises.

Ophthalmoscopic examination is not infrequently helpful. In simple valvular disease it is almost unknown to get optic neuritis or retinal hæmorrhage. If, therefore, it is certain that the patient's condition is due primarily to valvular disease of the heart, and not, *e.g.*, to granular kidney, the presence of optic neuritis or of retinal hæmorrhages will indicate that fungating endocarditis has supervened.

The question may be asked, Would not a blood-count assist the diagnosis? It might be expected that a condition in which organisms were growing in the masses of fibrin on the heart valves would lead to a leucocytosis; this, however, is not as a rule the case. Generally the leucocytes do not exceed 15,000 per cub. mm., so that a leucocyte count affords no reliable evidence either for or against fungating

endocarditis. There is one way, however, in which a blood examination might be of assistance, and that is to collect a few c.c. of blood from a vein aseptically, and have it cultivated for micro-organisms. Should other microbes than staphylococci be present (staphylococci are usually an accidental contamination from the skin) the diagnosis will be almost certain, though negative evidence from cultivation would not prove the converse.

To sum up, therefore, we would say that though there are cases of fungating endocarditis which conform to the old classification into the pyæmic and the typhoid types, and though there are some which are quite anomalous, the majority of the cases seen nowadays are of the cardiac type, cases, that is to say, in which the heart disease is of long standing, and in which, when symptoms of failure set in, it is difficult to decide whether these are purely mechanical or whether there may not be due to a superimposed fungating endocarditis. The presence of pyrexia without obvious cause is a strong indication of the latter; but some cases of fungating endocarditis may have little or no pyrexia; perhaps this in part depends upon the depression of the normal temperature in chronic heart cases. The main points to be on the look out for as aids in the diagnosis are enlargement of the spleen, progressive anæmia, multiple emboli, sudden and complete changes in the character of the bruit or bruits, spontaneous hæmorrhages other than hæmoptysis and menorrhagia, the presence of optic neuritis or retinal hæmorrhages, and finally the presence of micro-organisms in cultivations made from the patient's blood.

* It should be mentioned that in all these cases the temperatures were recorded four-hourly; but in the charts reproduced here only the highest and the lowest temperatures for each twenty-four hours are given.

REMEDIES AND THEIR USES.

ACETOZONE.

Antiseptic, Germicide, for External and Internal Use.

THIS substance, introduced by Parke, Davis and Co., 111 Queen Victoria Street, London, is an organic peroxide, and is said to be one hundred times more powerful as a germicide than peroxide of hydrogen. As dispensed, it is a white powder containing 50 per cent. pure acetozone, which is chemically a peroxide of benzoyl and acetyl ($C_6H_5.CO.O.CO.CH_3$). This powder keeps well, but it must be protected in carefully stoppered bottles from heat, damp, and all contact with organic matter. It is soluble in water to the extent of 1 part in 1,000 to 1 in 10,000, according to temperature, the age of the solution, etc. It may also be dissolved in neutral petroleum oil, ether, or chloroform, and to a certain extent in alcohol. It should, however, never be kept in solution for any length of time, as it gradually decomposes in all solvents with the exception of neutral petroleum.

Physiologically, besides its antiseptic action, it is a diuretic, but is otherwise practically inert. It has been employed with much success in conditions for which peroxide of hydrogen has been recommended, and is said to be specially valuable as an intestinal antiseptic in typhoid fever. With regard to the best method of administering the drug, it appears certain that water as a solvent is preferable to other media, as it assists in the liberation of the nascent oxygen on which the action of acetozone depends. It appears, moreover, inadvisable to give acetozone in capsules, as the drug, when liberated in the stomach, may irritate the mucosa. The aqueous solution should be made by shaking up twenty grains in a quart of warm distilled water for five minutes. It should then stand for two hours, and the doses decanted off as required. If preferred, the doses may be flavoured with orange, ginger, lemon, or saccharin, or given in syrup or some effervescing water; but the stock solution must not be mixed with any foreign substance. In some cases it may be necessary to begin with a weaker solution and gradually to increase the strength. In a cold, dark place, such as a refrigerator, such a solution will keep for at least a fortnight, so that if much is required a gallon jar may be prepared at a time. A cellar may be used to store it in the absence of a refrigerator. Although distilled water is not absolutely necessary, it is better to use it if possible. In no case should a "hard" water be employed, as acetozone is easily decomposed by carbonates. It should not be given directly after food, as it will then be too rapidly decomposed in the stomach.

ITS THERAPEUTIC USES.

For external use the solution must be filtered and mixed with two or three parts of cooled boiled water. As a dusting powder acetozone may be mixed with 100 to 1,000 parts of boracic acid powder or talc. Ointments should be made with a paraffin basis only, and may be of .5 per cent. strength to begin with. If

necessary, stronger preparations may subsequently be employed.

For use in a nebuliser, a special preparation is on the market, but a solution which will be effective may be prepared in the following manner: 1 part of acetozone is added to 100-500 parts neutral liquid paraffin previously warmed to 130° F. The mixture is well shaken and then filtered before it cools.

In typhoid fever the usual method of administering this drug as practised in the United States hospitals is as follows: On admission the patient is given 8-10 grains of calomel, either in a single dose or in repeated small doses. He is then given at least 4 ounces of cold acetozone solution (made as described above) every two hours. The stock bottle is kept in the refrigerator. At least two pints should be taken in twenty-four hours, and the solution may be used to replace water or other drink. A gentle laxative is occasionally administered, but otherwise no drugs are given. This treatment is said to affect markedly the length and severity of the attacks. The stools become less offensive, and tympanites subsides in two or three days; the colour and consistency of the stools are, however, unaffected. Relapses and hyperpyrexia are said to be unusual under this treatment, and the general condition of the patients is good.

Other diarrhoeal conditions may be treated on similar lines. In dysentery and colitis rectal injections of 1 in 1,000 acetozone solution may be employed daily in addition to its administration *per os*. In children suffering from diarrhoeal diseases, acetozone may be given as in adults. The solution, however, should be diluted with an equal volume of water and flavoured with orange or lemon syrup. Teaspoonful doses may be given every half-hour at first, the intervals being gradually lengthened as the case improves. Irrigation of stomach and colon with 1 in 3,500 acetozone may also be employed. For the stomach, the irrigations should take place before feeding, and the water used should be warm.

In infective conditions of the eyes a solution of one grain in two fluid ounces is sufficiently strong. This causes a little smarting for a few seconds, but no real damage; a drop or two may be instilled every hour.

For throat work a nebuliser may be employed, or the throat may be swabbed with a 1 per cent. solution every few hours. In simple tonsillitis the results are said to be excellent.

In tinea tonsurans a strong aqueous solution (twenty grains to one quart) may be applied to the scalp. This may apparently cause some soreness of the skin, but no serious inconvenience will follow.

In urethritis a saturated solution (the "stock solution") may be employed, but this has in some cases given rise to irritation of the mucous membrane, so that it seems advisable to begin with a solution of one half or one third that strength.

As a dressing for suppurating or gangrenous wounds, 2½ grains of acetozone in 4 ounces of water are recommended.

PRACTICAL NOTES ON DIAGNOSIS AND TREATMENT.

Syphilitic Periostitis.

IN some cases of syphilis not only does mercury fail to prevent periostitis, but it appears to make it worse.—*Mr. Hutchinson.*

Acute Dysentery.

IN acute dysentery or other irritable condition of the lower bowel, two to three drams of bismuth subnitrate given in an enema are much more useful than the same medicine ordered by the mouth.

Theobromin as a Diuretic.

THEOBROMIN (45 to 75 grains daily for three days) is often very successful in cases of cardiac dropsy. It is sparingly soluble in water, but may be given in a cachet or as a pill.

Chronic Bronchitis.

THE following is a useful prescription:—Tinct. nux vomica, tinct. of sanguinaria, of each, min. xl; extract of pinus canadensis (dark), 3iv; simple syrup, 3iv. A teaspoonful every four hours.

Chian Turpentine in Cancer.

THE use of chian turpentine in cancer of the uterus was suggested by Dr. Clay. Though other observers failed to get equally good results, most admitted that the drug certainly relieved the symptoms and especially the pain.

Obstinate Hiccough.

DR. CHARLES S. DICKINSON reports an obstinate case of hiccough which resisted a long series of remedies. At last it occurred to him to try the effect of oatmeal porridge served with milk, after which the hiccough promptly ceased. The suggestion is that the oatmeal had a demulcent action on the irritated gastric mucous membrane.

Caffein.

CAFFEIN is not only a heart tonic, but is also a valuable diuretic. It may be prescribed as the citrate, and either alone or in combination with tincture of convallaria. One of its chief uses is in the slow, labouring heart of senility, as it somewhat accelerates the heart's action and invigorates the systole.—*Dr. Seymour Taylor.*

Rickets and Caries of the Spine.

THE rigidity of the back at once separates cases of caries from the curvatures we so often find depending on rickets. In any doubtful case the child has only to be laid prone upon its chest, while the surgeon seizes its thighs and moves them laterally to and fro. In rickets the spine will be noticed to be quite mobile, but in caries it will move as a whole.—*Mr. Ballance.*

Hæmorrhage after the Menopause.

ALWAYS take it as a most serious symptom if a woman consults you, after the menopause, suffering from hæmorrhage. Always insist on a vaginal examination, and do not be deluded because you find the os and cervix normal, but thoroughly examine bi-manually, and if there is much pain in the examination do not hesitate to make a thorough examination under an anæsthetic.—*Mr. Bowreman Jessett.*

Strychnine in Progressive Muscular Atrophy.

IN progressive muscular atrophy the hypodermic injection of strychnine is of unquestionable value. *Sir Wm. Gowers.*

Duodenal Ulcer.

IF we find a patient who complains of pain rather to the right side of the abdomen, always coming on some hours after food, and if he passes black motions, we may be justified in assuming the probability of duodenal ulcer.—*Dr. Cayley.*

Rectal Examination.

IT is wise never to prescribe for rectal symptoms until a thorough examination has been made. The neglect of this often means that the early, and therefore operable, stage of malignant disease is overlooked.

Taxis in Strangulated Hernia.

I WOULD strongly enjoin on you that success in strangulated hernia is greatest for him who operates early and with a precise appreciation of the circumstances. I hold strongly to the view that a really strangulated hernia is rarely reducible by taxis.—*Mr. J. W. Hulke.*

Thyroid Gland in Psoriasis.

DR. BYROM BRAMWELL believes that in this condition the best method is to give the patient as large doses as he can bear. He finds that many such patients can take fully 30 grains daily for long periods of time. The pulse-rate affords the best warning of excess in dose.

Ulcer of the Œsophagus.

ULCERATION of the œsophagus is in the great majority of cases, to the extent probably of 90 per cent., due to carcinoma. It may, of course, result from the swallowing of corrosive liquids, and sometimes from the swallowing of a solid body. Syphilitic ulcers are described, but they are very rare.

Spectacles for Children.

THE common apprehension that the wearing of spectacles by young people is fraught with danger, owing to a risk of breakage during play, and of incidental damage to the eyes by particles of glass, is very ill-founded and mischievous. I have met with no example of such an accident. Parents and teachers often demur to glasses being worn when cricketing, but certainly upon insufficient grounds. *Professor McHardy.*

Capillary Bronchitis of Infants.

THIS condition, unless arrested somehow, will soon end in death. The blue face and ear-tips, respiration reaching 100 or more, flying pulse with epigastric recession and struggling for breath, are significant enough. I know of no means of meeting this perilous state—and I have tried many—which can be compared with bleeding—bleeding by the application of leeches to the chest, not one or two, but four or five or six. This is to be followed by surface stimulation, or in the exceptional occurrence of hyperpyrexia, by the cautious application of ice. Of course, a large number of cases treated in this fashion die. But of all attempts at rescue I believe this to be the best.—*Dr. Octavius Sturges.*

THE BOOK WORLD OF MEDICINE AND SCIENCE.

THE ESSENTIALS OF HISTOLOGY, DESCRIPTIVE AND PRACTICAL, FOR THE USE OF STUDENTS. By E. A. SCHÄFER, LL.D., Sc.D., F.R.S., Professor of Physiology in the University of Edinburgh; formerly Jodrell Professor of Physiology in University College, London. (London: Longmans, Green and Co. 8vo. Price 10s. 6d. net.)

THIS is the seventh edition of Professor Schäfer's well-known handbook on histology. Seeing that the first edition was published so recently as 1885, it is obvious that the book is in demand and supplies a want. It is probably the best publication upon the subject, and it is indispensable to the medical student. There is no change in the general arrangement of the subject-matter. The whole course of histology is divided into fifty lessons, each lesson constituting a chapter, beginning with instructions how to prepare and examine each tissue, and ending with a full description of the appearances to be seen in the preparations made. Notwithstanding the fact that there are 507 pages of print, the book is by no means cumbersome; it is barely an inch thick. The present edition is enlarged partly by additions to the text, and partly by the provision of new illustrations. The chief addition to the text has been in connection with the central nervous system, the finer structure of which is well described; and the author has been fortunate in being able to reproduce some of Professor Sobotta's figures and a large number of original drawings by Professor Ramon y Cajal. There are altogether 547 figures in the book, almost all of them extremely good and helpful to the student. A new feature is the printing of many of the illustrations in colour, which affords a better idea of the appearance of the stained preparations. When almost everything is good it is a pity that anything not up to standard was allowed to pass. Excellent though most of the illustrations are, some of them are quite poor. There is no picture in the book which conveys any clear idea of the microscopic appearances of a lymph gland. Fig. 54 may be pardoned for being a teased preparation, but fig. 253 has no such excuse. No student could be expected to learn to recognise lymphatic gland tissue from it. Were it not for the description in the text, it might be taken for a developing bone. Fig. 86, again, professes to represent elastic fibres in cross-section, but it might be a piece of adipo-fibrous tissue; it gives no idea of the sharp angularity that elastic fibres in cross-section present. Again, reproductions of micro-photographs are excellent in their way, but we cannot help feeling that the illustrations of sections of the medulla oblongata and pons would have been much more helpful to the student had they been rendered at least semi-diagrammatic, whilst yet preserving the general characters of an actual section. We are surprised that so large a picture of Oliver's apparatus for estimating blood-corpuscles is given, whilst the Thoma-Zeiss hæmocytometer is not illustrated, and is described in its old form, the directions being given with so little detail that it would be very difficult for a student, working by the book alone without an instructor, to follow them. In the preparation of hæmin crystals no direction is given as to the addition of a minute crystal of sodium iodide as well as glacial acetic acid to the blood, though the addition of such a crystal makes the preparation so much easier. In an appendix directions are given for hardening and embedding various tissues for section, together with an account of microtomes and of special methods. Any account of such methods is of little use unless exact details are given. In a book intended to instruct those who do not already know, it is of little use to give directions such as the following for em-

bedding in paraffin: "Before being soaked in melted paraffin, the piece of tissue may be stained in bulk; it is then dehydrated by a series of alcohols (50 per cent., 75 per cent., 95 per cent.), finishing up with absolute alcohol; after which it is soaked in cedar wood oil, xylol, or chloroform. It is now transferred to molten paraffin, which should not be too hot." The student will at once need to ask someone how long to leave the tissue in each strength of alcohol, how hot the paraffin should be, and so on. We should like to see points like these elaborated, or else the imperfect directions altogether omitted. Though we find fault with some few matters of this kind, we consider the new edition of "The Essentials of Histology" to be, upon the whole, extremely good. It might be even better, but without doubt it will continue to hold the position it has established of being the book for general use in the histological laboratory.

THE BRITISH JOURNAL OF TUBERCULOSIS. Edited by T. N. KELYNACK, M.D. (London: Baillière, Tindall, and Cox. Vol. I, No. 1. January 1907.)

No one, we think, will be disposed to question a policy which has expressed itself in the resolution to establish a journal devoted to the study of tuberculosis and to the problems which arise in connection with that disease. These problems are in part pathological and so fall within the purview of the medical profession. There are others, however, which are mainly social and economic, and these concern many interests in the general community. The new journal proposes to address itself to all aspects of the subject, and in the first issue may be found fair promise of its ability to achieve this ambitious programme. The Editor has certainly been fortunate in his contributors, and if he is able to maintain the level reached in his first number he certainly will not lack readers. Most effective under the title of "The Study of Tuberculosis" is the "Retrospect" by Professor Clifford Allbutt, and "An Anticipation" by Dr. R. W. Philip. The former has all the grace and charm invariably associated with Professor Allbutt's literary work, and may be specially commended to those who entertain doubts regarding the progress of medical treatment. Dr. Philip discusses modern methods in the light of his own considerable experience, and it is of importance to take notice of his conviction of the great value of tuberculin as a curative agent. Sir Richard Douglas Powell, Sir John Moore, and Dr. Byrom Bramwell contribute articles on the care and control of the consumptive poor, and from these may be gathered some indication of the numerous questions which are raised by the problem of tuberculosis. Other articles are by Sir Lauder Brunton, Sir Hermann Weber, and Sir Samuel Wilks—names which are a guarantee of interesting and authoritative writing. Finally may be mentioned notices of individual sanatoria and health stations, as affording information useful both to patients and practitioners. Altogether the new journal has made an excellent start, and we wish it a successful career. That it will be conducted with judgment and discretion, and will be preserved from the isolation and detachment which are the special dangers of publications appealing to special and peculiar interests, we have no doubt. This is the professed aim of the editor, and every confidence may be placed in his resolution.

BOOKS RECEIVED.

BAILLIÈRE, TINDALL, AND COX.

"The Prevention of Cancer." By C. B. Keetley, F.R.C.S.

W. B. CLIVE.

"Matriculation Directory." No. XLV. January 1907

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

CURRENT HOSPITAL TOPICS.

The Annual Meeting.

WE have pleasure in announcing that the annual Court of Governors of King's College Hospital will be held at the hospital, Portugal Street, W.C., on February 28th at 4 o'clock. The Royal Free Hospital's meeting is on February 25th at 4.15; and that of the Cancer Hospital at 4 P.M. on February 27th. We shall be very glad to announce the date and hour of the annual meetings of the principal hospitals, if due notice be sent to us a fortnight before the date fixed. In present circumstances notices are frequently sent so late as to make it impossible to announce the date in *THE HOSPITAL*. This week, for instance, we have received three notices, one within 24 hours, and two others within six days, of the date of the meeting. We mention the matter because we are always glad to co-operate with the secretaries by encouraging the attendance of governors, with the object of making the annual meeting an event in the hospital year. It ought then to be attended by increased popularity, and so made the means of producing additional funds.

Hospital Reconstruction in London.

WE have had the pleasure of making a careful inspection of several portions of the Royal Free Hospital in Gray's Inn Road. In the ten years which have elapsed since we last inspected this hospital many and great improvements have been made. The buildings are, of course, not new, but great ingenuity and skill have been exhibited in introducing modern improvements by utilising every inch of space to the fullest extent. The result is that, so far as the wards are concerned, the necessity for rebuilding has been obviated for practical purposes, and that the full requirements of a modern hospital will be supplied when a new out-patient department, with accommodation for certain special departments, and new and modern operation theatres are provided. We feel confident that the committee would be well advised to instruct the architect to prepare plans with estimates for the whole of these buildings, and then to set to work and raise the money. The actual sum involved in the modern sense is not excessive. We have no doubt that it would be readily forthcoming if the right steps were taken to secure this result. Any visitor of experience must be pleased with the stamp of the practical character of the work being done, which the whole institution bears, as is evidenced by the

actual condition of the wards and other portions of the hospital. We congratulate the authorities upon the present high efficiency of the whole establishment, which has greatly advanced under the treasurership of Mr. Chas. Burt, who has rendered excellent service to the institution in many ways during a long period of years.

Some Cruelties of the Voting System.

"E. W." a candidate for a pension at the British Home and Hospital for Incurables, Streatham, S.W., has circulated a letter and correspondence between himself and the secretary, which, assuming the statements are correct, graphically illustrates one aspect of the cruelties entailed upon poor candidates by the voting system. "E. W." was selected as a candidate for pension in September 1906, and in his efforts to be elected in the following November spent £5, by which means he secured 34 votes. This expenditure seems to have exhausted "E. W.'s" resources, and on the 26th January he wrote to the secretary at 72 Cheapside, E.C., to inform him that he was compelled to apply for parish relief. He expresses much distress at this circumstance, due to the fact that "I am quite at the end of my resources, and my wife and children are suffering owing to my inability to provide for their needs." It appears that rule 32 of the Streatham institution provides, in effect, that the names of selected candidates receiving parish relief before election will be removed from the voting list. This may be proper enough for certain cases, but should not apply where, as in "E. W.'s" case, the pecuniary exhaustion can be claimed to be directly caused by the voting system. "E. W." appeals to the secretary for consideration in the specially distressing circumstances of his particular case, and the secretary states his opinion that "E. W." is wise under the circumstances in applying for parish relief. He intimates, however, that the rules must be enforced, and that "E. W.'s" name has in consequence been struck out. How any responsible committee can support a system which entails hardships of this description, and perpetuates evils like those just explained, is a mystery for which it is not easy to account. The report of the Charity Voting Reform Association, just issued, gives several cases where voting charities have reformed their system so as to prevent cruelties of this description. This Report shows

very clearly, that no real, financial or other justification can be urged, in support of the perpetuation of the old and flagrant evils of the voting system. It ought no longer to be permitted in connection with any modern charity which aspires to be considered well administered.

The Right and Wrong View.

MUCH of the excessive free medical relief granted by the hospitals is due to prejudice based upon tradition. The tradition held by many members of the medical staff of the hospitals, as well as by lay officials, is that to survive, as a voluntary institution, a hospital must show an increase in the work done every year. This view, so far as the honorary medical officers are concerned, rests upon the opinion that if patients are discouraged from coming to a hospital, by the enforcement of regulations, tending to reduce the numbers of patients actually admitted to treatment, the numbers will gradually fall off until there are not enough patients to maintain the hospital's reputation, and to provide material for teaching purposes. The view of the lay official, on the other hand, is based upon financial considerations. He dreads the effect upon the giving public of finding that his hospital actually relieved fewer patients in the current than in the preceding year. In fact,

both views are mistaken, if the best interests of voluntary hospitals are to be considered in the present day. The reason is that a hospital which restricts its number of patients must improve the quality of its medical service, and so prove most attractive to patients who are really ill. Similarly, now that the larger and more intelligent givers to hospitals have come to take, as they do take, an individual interest in the work done and the cost of that work, any voluntary hospital, which has had the courage to cut down the number of the patients, and to show at the same time that no abuse could exist under the system by which these results had been secured, must in a financial sense benefit very materially. Wrong views, too, are often held as to expenditure. An amusing example of this is afforded by the committee of the Kingston (Hereford) Cottage Hospital, which has just issued a statement referring with some gratification to the fact that the hospital is so valuable because "more dressings and medical appliances have been used." The experienced administrator watches the expenditure, especially upon dressings, with an eagle eye, and any increase above the average indicates to him that something is wrong, not that the hospital is becoming more valuable because more money is being spent on this or that item!

TWENTY-FIVE YEARS AS A HOSPITAL SECRETARY.

PRESENTATION TO MR. P. J. MICHELLI, C.M.G.

MR. P. MICHELLI was the recipient of a handsome presentation at a complimentary dinner given on February 15 at the Trocadero Restaurant in commemoration of his having had conferred upon him the honour of C.M.G. and his having completed the twentieth year of his office as Secretary of the Seamen's Hospital Society. Mr. Percival Nairne, the Chairman of the Society, occupied the chair, and amongst those present were Sir Henry Burdett, Sir William Treacher, Sir William Bennett, Sir Patrick and Lady Manson and Miss Manson, Sir John and Lady Craggs, the Consul-General for Austria-Hungary, Dr. Arthur Lathom, Dr. and Mrs. Guthrie Rankin, Messrs. Thomas Ryan (Secretary of St. Mary's Hospital), T. Hayes (clerk to St. Bartholomew's Hospital), and Clare Melhado (Secretary-Superintendent of the Middlesex Hospital).

The presentation took the form of an elegant silver gilt William IV. centrepiece dated 1836, weighing 95 oz., on the base of which was the inscription: "Presented to Pietro Michelli, Esqre., C.M.G., by his Colleagues and Friends. 15th February, 1907."

After the toast of "The King," the Chairman proposed the health of "Our Guest." The honour conferred by his Majesty upon Mr. Michelli had been a matter of the highest gratification not only to his family but to all who had had the opportunity of working with him in the various branches of his work for so many years. (Applause.) Brought up in the Cove of Cork, Mr. Michelli had a natural predilection for the sea and ships, and in his early days, serving in the office of his father, the Consul for Austria, at Cork, he had become more closely connected still with ships and seamen. Thirty years ago Mr. Michelli became

the Steward of the Seamen's Hospital at Greenwich, a post which had led him, as it had led a good many of his successors, to a high position in the hospital world. Since that time, with the exception of the five years from 1882 to 1887, when he held the very responsible position of Secretary to St. Mary's Hospital, Mr. Michelli has been connected with the Seamen's Hospital. All those who had been engaged in the internal work of the hospital knew what devotion he had shown to its interests and to what a very great extent the hospital had been indebted to him. (Hear, hear.) But Mr. Michelli had in addition made himself a name and a position in the hospital world which was certainly a very high one. Years ago he served as the Honorary Secretary of Lord Sandhurst's Committee on the Metropolitan Hospitals, later on he was Hon. Secretary of the Hospitals Association, recently he had been, and the speaker believed was still, a member of the Special Committee appointed by the Council of King Edward's Hospital Fund to consider the simplification and assimilation of hospital accounts and statistics, and besides this he had been the President of the Hospital Officers' Association, and was at that moment the President of the Hospital Officers' Club. (Applause.) At the time when Mr. Michelli joined the staff of the hospital, the *Dreadnought* Hospital was the sole institution connected with the Society. Since that time the Society had spread and now included a branch hospital between the Victoria and Albert Docks, dispensaries at the East and West India Docks and at Gravesend, the London School of Tropical Medicine, and the London School of Clinical Medicine. When they considered what a great addition these developments had been to the secre-

tariat duties, they would see that the services Mr. Michelli had rendered to the Seamen's Hospital and to the hospital world at large were of no mean character. (Applause.) During the whole of this time his relations with the staff of the hospital had been of the most cordial nature—the whole of the professional, as well as the civil, staff looked to Mr. Michelli to bring them through any difficulty, and he had done this with the most remarkable success. In the name of Mr. Michelli's friends and associates in hospital work, he had to ask his acceptance of an antique centrepiece, which they hoped might be a sort of memento for his family of the appreciation of the Seamen's Hospital Society and of those friends who had been associated with him in work which he had done so unfailingly and ungrudgingly in the cause of hospitals at large. (Applause.) As his friends knew that a gift to him personally would only be half a gift, he (the speaker) had to ask Mr. Michelli's acceptance, on behalf of Mrs. Michelli, of a diamond bracelet, which they felt no doubt Mrs. Michelli would look upon with some pride as a recognition of a very distinguished period in the professional and social life of her husband. (Applause.) They all wished Mr. and Mrs. Michelli long life and continued prosperity, and hoped that they might enjoy their own society and the distinctions which it had pleased his Majesty the King of Great Britain and Ireland, and his Majesty the King of Sweden, to confer upon him with those of all the other Sovereigns who might decorate Mr. Michelli in time to come. (Loud applause.)

Mr. Michelli (who was greeted with loud and continued applause) returned thanks. He said he thought that it must fall to the lot of but few secretaries to be honoured as he was honoured that evening. To much fewer must the privilege be given to be able to recognise the services they had received not only at the hands of the Board they served, but at the hands of such distinguished members of the medical profession as constituted the medical staff of the Seamen's Hospital Society. After referring to the assistance he had received from the chairmen he had worked under and the Board of Management under whom it was a privilege to serve, and to whose enterprise and public spirit was due the success of the hospital and the establishment of the two schools of medicine which had been referred to by the Chairman, Mr. Michelli said that another matter which had conduced to the success of the hospital was the absolute confidence which had existed between the Board of Management and the medical staff. Whilst he recognised his indebtedness to those he served under, he would like to be allowed to say how much he owed to those who served with and under him; and he was not unmindful of what he owed to his colleagues in the hospital world. Most gratifying, too, to him was it to see present that evening Sir Henry Burdett, a predecessor of his in the position he held, through whose courtesy he owed his first insight into hospital life, and who, in all the years which had followed, had shown him many and great kindnesses. After mentioning that there were no fewer than nine men acting as secretaries to hospitals at the present time who had served their apprenticeship at the *Dreadnought* Hospital, Mr. Michelli returned his most cordial thanks on behalf of himself and his wife for the honour which had been done him, and added that that evening had been made doubly dear to him by their associating Mrs. Michelli with himself on that occasion. (Applause.)

Sir Henry Burdett, in proposing the health of "The Society," referred in feeling terms to the Chairman, Mr. Nairne, with whom he had been associated in hospital affairs for thirty-four years. He thought that Mr. Nairne had done a work which ought to be definitely and publicly recognised, because it amounted to so much, to so many interests, and to so many people not only in the country but throughout the British Empire. (Applause.) Mr. Nairne had been the master mind which had directed most of the developments which had made for the success of the Society, and he hoped—because he believed that public recognition was the best aid to progress and the best encouragement to the best work—that before a very long time had elapsed there might be some public recognition of this quiet, modest, firm, great man, who, because of his retiring nature and because of his strength, had been far too little known and far too little recognised. (Applause.) Finally, he would like to see by the centenary of the Society in 1921

that they had raised the money to put up the finest modern hospital that, with all their experience and knowledge, they were capable of producing, and that most of those present that evening would have the privilege of taking part at the opening of this modern hospital devoted to the care and the comfort of the seamen of all nations. (Applause.)

Sir Patrick Manson responded on behalf of the London School of Tropical Medicine, and Sir William Bennett on behalf of the School of Clinical Medicine.

Sir William Treacher, in proposing the health of "The Chairman," endorsed what Sir Henry Burdett had said with reference to a public recognition of the great services rendered by Mr. Nairne to the Seamen's Hospital.

The Chairman having briefly returned thanks, Sir Henry Burdett proposed "The Ladies" and the health of the Honorary Secretary to the dinner—Mr. Kenneth Steele—whose reply concluded the proceedings.

HOSPITAL MEETINGS.

CHARING CROSS HOSPITAL.

THE annual meeting was held on Wednesday, February 20, the Right Hon. the Earl of Kilmorey in the chair. The report shows an improvement in the financial position, largely due to the special Committee of Inquiry, presided over by Lord Sandhurst. It was decided to close two wards, containing thirty-seven beds. Three of the vacant wards have been let to the Royal National Orthopaedic Hospital for one year and probably longer, all of which tends to diminish the deficit mentioned in the last report. A local maintenance fund has been inaugurated by the Earl of Kilmorey to make systematic efforts to obtain support from the neighbourhood in which the hospital works. The ordinary income last year amounted to £15,854, as compared with £11,911 in 1905, while grants and legacies and other funds brought it up to a total of £30,854. The ordinary expenditure was £18,770 last year, as compared with £20,111 in 1905, and while some part of the decrease is due to the closing of beds, part is due to economy, the cost per bed occupied having been reduced by £4.

The mortuary chapel and ante-chamber have been restored and furnished as a memorial to Miss Esther Hill, a brilliant pupil of the Royal College of Music.

EAST LONDON HOSPITAL FOR CHILDREN.

THE half-yearly Court of the East London Hospital for Children was held on February 18. During the year 2,054 patients had been treated in the wards, an increase of 467 over last year, while 1,391 new cases were seen in the out-patients' department. The daily number of patients in the hospital averaged 113.34, and the average period of residence of each patient amounted to 21.38 days. By means of careful thought and economy on the part of the staff, the cost of maintenance of each patient per week had been reduced from £1 5s. to £1 0s. 6d.—a figure which might be regarded as almost a record in hospital administration. The increase in the number of in-patients was partly due to the extra number of beds obtained by the opening of the rest of the isolation block, but these beds were in use for only six months of the year. Their opening had, however, resulted in the wards enjoying a greater immunity from infectious diseases. The diphtheria ward and the two small wards for cases under observation had only been in use for six months, but the Board feels that their usefulness has already more than justified their cost.

There has been a decrease in annual subscriptions, which form the most reliable source of income. Donations showed a satisfactory rise, but notwithstanding this the financial position of the hospital, if it did not improve, will oblige the Board to consider some drastic measures of retrenchment. The Chairman felt that the existence and work of the hospital was insufficiently known, and suggested that a half-yearly Court, held at the Mansion House, might attract more attention to the needs of the institution. The Board congratulates the governors on the fact that, despite the great increase in the number of patients and the extra cost entailed by the maintenance of a new block for half the year, the total ordinary expenditure only exceeded that of last year by £50.

The Convalescent Home at Bognor has been much hampered in its work by continued outbreaks of infection and the necessary closing of the home for repainting, etc.

NEWS AND COMING EVENTS.

MAJOR P. B. WALKER, J.P., has been elected President of the Dewsbury General Infirmary.

At a public meeting held at Maesteg last week it was decided to form a Committee to consider the question of establishing a cottage hospital in the town.

MR. A. BOAKE, a trustee of the Children's Sanatorium for Consumption, at Holt, Norfolk, has promised a sum of £500 for endowment of the institution.

At the annual meeting of the St. Mark's Hospital for Fistula Sir Richard Martin, Bart., the Treasurer, stated that the sum of £1,000 in new annual subscriptions is essential for the maintenance of the hospital.

At the meeting of the Incorporated Society of Medical Officers of Health to be held on March 8, Dr. O'Connor will read a paper on "Combined Sanitary Districts." The meetings of the Society are held at No. 1 Upper Montague Street, W.C.

At the annual meeting of the Reading Dispensary the President, Mr. May, suggested that an infant department, similar to that existing at Ghent in Belgium, should be established in connection with the dispensary. The proposal is having the attention of the Committee.

THE Hull Corporation has decided to build a new city abattoir. The building will have lairage for 200 beasts, 600 sheep, and 200 pigs, with ample provision for further extension. The principal slaughter hall will be 91 feet by 36 feet, with four bays, each having two killing rings. The estimated cost of the abattoir is £33,000.

SIR WILLIAM BROADBENT, one of the founders of the "Société de l'Entente Cordiale Médicale," has been obliged, owing to ill-health, to cancel his arrangements for a course of medical lectures in Paris. The association has arranged to open its series of lectures in May next with a course of clinical demonstrations on "Aphasia" by Dr. Pierre Marie.

THE sixteenth edition of the "Local Government Annual and Official Directory," which has just been published, is, as usual, a mine of information on the details of the various metropolitan and suburban boards, councils, committees, corporations, and combined authorities. In addition, it gives a useful calendar in the shape of "The Local Government Remembrancer."

WE called attention in our issue of February 9, under the title "Strength in Little Things," to the wonderful character and results of an appeal issued by a lady in Worcestershire. After receiving some twelve copies of the appeal literature in question by various posts in stamped envelopes we have now received No. 13, which is unstamped, for which double postage was inadvertently paid on delivery. We hope the supply has now come to an end so far as we are concerned.

AN interesting series of experiments has been carried out at the Plague Research Laboratory at Bombay with a view to testing the comparative germicidal properties of pure nickel and nickel alloy, and to determine whether plague may possibly be conveyed by coins. The results show that all the coins had considerable bactericidal action on the plague bacillus, for they rendered sterile a highly virulent strain of that germ within twenty-four hours.

THE Royal Commission on Vivisection has issued its first report, consisting of the evidence so far taken.

THE fund started by Sir George White in aid of the Bristol Royal Infirmary now stands at £50,000.

AN International Exhibition of Professional Newspapers and Periodicals will be held in May at Copenhagen.

LORD ROTHSCHILD has accepted the office of President of the Royal Buckinghamshire Hospital for another year.

THE International Congress of Laryngo-Rhinology will be held in Vienna on April 21, 1908. Professor Chiari will preside.

LORD KINNOULL has offered the directors of the Perth Infirmary a site for the proposed new buildings at a nominal fee duty.

AN exhibition of urban cottages and homesteads for small holdings is to be held at the Garden City, Letchworth, this summer.

THE International Conference of the Red Cross Society will be held in London in May next, the exact date not having been definitely fixed as yet.

The annual meeting of the governors and subscribers of Queen Charlotte's Lying-in Hospital, Marylebone Road, N.W., will take place on Monday, February 25, at 3 P.M. at the hospital.

MR. JAMES TAYLOR, who has been actively connected with the Chester Infirmary for the last half-century, has resigned his post as senior surgeon, and has been appointed honorary consulting surgeon to the institution.

THE annual Court of Governors of the Royal Free Hospital, Gray's Inn Road, W.C., will be held at the hospital on Monday next, February 25. The Right Hon. the Earl of Sandwich will take the chair at 4.15 o'clock.

THE annual general meeting of the Association of Certificated Dispensers will be held in the Apothecaries' Hall on Thursday, February 28, at 7.30 P.M. Address by F. S. Toogood, Esq., M.D. (Lond.), barrister-at-law.

DURING the past year 120 cases were treated in the Samuel Thompson Ward (Tropical Ward) of the Royal Southern Hospital, Liverpool. Among these were cases of malaria, beri-beri, dysentery, leprosy, and sprue, and the patients included members of sixteen different nationalities.

A CORRESPONDENT in the *Rugby News* suggests the starting of an "In Memoriam" fund in connection with the local hospital—"a fund wholly reserved for sums not exceeding what one would spend in purchasing a wreath in memory of a departed friend."

THE German Congress of Internal Medicine, under the presidency of Professor Von Leyden, meets this year at Wiesbaden on April 15. The Congress, which usually lasts for a few days only, is attended by all the prominent physicians and clinicians, and the programme of papers and discussions is generally a very interesting one. This year such subjects as New Methods of Clinical Diagnosis, Chronic Permanganate Poisoning, and the Aetiology and Treatment of Migraine, figure on the Agenda Paper.

The Hospital

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THE INTERNATIONAL SOCIETY OF SURGERY.

THE International Society of Surgery holds an interesting place amongst the societies of the world, and if it be well managed it appears that it will be useful and successful. It was established in Brussels in 1902, with a limited number of members. It meets once in three years, the last meeting being in 1905, and the next in 1908. His Majesty Leopold II., King of the Belgians, is patron, and His Excellency Professor Czerny of Heidelberg is President. The Society is governed by a permanent International Committee composed of a delegate from each country, the ex-Presidents of the Congress, a Secretary, and a Treasurer. Every country is represented by three members, of whom the delegate is one, and these three members form a National Committee charged with the selection of candidates for membership and the conduct of the local business of the Society in the intervals of its meetings. The subjects considered at the triennial meetings of the Society are thought out carefully beforehand; members are invited to take a part in them who are specially qualified to do so, and their contributions are printed and circulated some weeks before the actual meeting. Every member of the Society therefore is fully cognisant of the views which will be brought forward, and with the printed paper of the speaker in his hand he is able to endorse or differ from the views advanced. The subjects considered at the meeting in 1905 were: "The Value of the Examination of the Blood in Surgery," "The Treatment of Prostatic Hypertrophy," "Surgical Interference in Non-malignant Disease of the Stomach," "The Treatment of Tuberculous Arthritis," and "The Treatment of Peritonitis"—all good practical subjects, which elicited excellent discussions in English, French, and German.

The meeting of the Society in September, 1908, promises to be equally fruitful. It has been decided to organise an exhibition illustrative of cancer and its treatment. With a view to secure a systematised method of procedure in the construction of reports relating to specimens, some suggestions have been prepared by Dr. Jules Dollinger, Professor of Clinical Surgery in the Royal University of Budapest, who is President of the International Museum of Cancer. Specimens for exhibition will

be received by Professor Depage in Brussels, and the exhibition is not necessarily confined to members of the Society. The Congress will be so arranged as to allow exhibitors to make such demonstrations as may appear desirable by the Society during its meeting. No attempt has hitherto been made to hold an international museum of cancer, and the idea is a good one, though it remains to be proved whether it can be carried out on any large scale. Such a museum might be made to show, for instance, the real existence of contact carcinomata, which are often doubted because they are rarely seen; the history and course of endotheliomata, because as yet surgeons know very little about them; whilst the new growths of synovial membranes are urgently in need both of study and of illustration. The Congress has already decided the headings under which the cancer question is to be considered. In brief, they are: The results of treatment by modern operative methods; fresh methods of treatment; the result of treatment by methods other than operative, such as light treatment; serum therapy, and the like. It is further considered desirable to ascertain how far the public ought to be instructed in the early signs of cancer with a view to earlier diagnosis, and consequently of earlier operation. Apart from cancer, the other subjects for consideration will be the surgery of the liver, of the spinal cord, and of herniæ; and there will be a discussion on anæsthesia.

It is very clear from this programme that the cancer discussion will be the most full, and the last question will be by no means the least interesting. Early recognition in cases of cancer means early removal in the majority of cases, with corresponding increase in the prospect of life. But too often recognition is delayed because the patient does not apply for a diagnosis until his attention is drawn to some unmistakable sign, and this is due to ignorance rather than to carelessness. There is a prevailing opinion that cancer is always painful from the beginning, whereas it is really painless in the great majority of cases; most people are unaware of the precancerous conditions in which the continuance of irritation is extremely likely to end in the formation of a malignant growth. Were the public properly instructed in these matters, many tongues

would be either saved or removed with a better chance of success. Many persons with cancer of the large intestine would submit to a local removal rather than wait until a colotomy was alone possible; and many a woman with cancer of the breast would not need to be told that she had postponed

too long her visit to the surgeon because she had not suffered pain. Such information could be disseminated readily enough by the exercise of a little tact, without in any way creating a panic, and it would be very beneficial to all classes of the community.

MEDICAL PRACTITIONERS AND THE MIDWIVES ACT.

THE historical account of the evolution of the official midwife, which has recently been put on record by Dr. C. J. Cullingworth, will revive the memories of some acute and comparatively recent controversies. Opinion in the medical profession was sharply divided in reference to the policy which led up to the Midwives Act of 1902, and also in regard to the corporate action of the Obstetrical Society in examining and certifying midwives. It will be remembered that at one time the Society's action came under the notice of the General Medical Council, and that the Council pronounced condemnation in no uncertain terms. The Central Midwives Board is now the sole licensing authority by which the examination and certification of midwives is conducted. Similarly, the Midwives Act is now an accomplished fact, and even those who object to it must realise that it has come to stay; the legally recognised midwife must be accepted as one of the permanent factors of the situation.

Looking to the future it is probably at present too early to advance a complete criticism of the operation of the Act which became part of the law of the land in 1902. Many experiences under its provisions have provoked complaint and discontent, and there can be little doubt that sooner or later the whole question will come under Parliamentary review. In the meantime it is essential to emphasise the injustice which the present position entails on medical practitioners called upon to attend women in accordance with the provisions of the existing Act. As has been pointed out again and again, no arrangement is made for the payment of medical services rendered under these conditions. The midwife, in the presence of any one of a number of contingencies, must, according to the terms of the law, advise that a medical practitioner be summoned, and must decline further services unless this advice is accepted. Whatever may be the exact technical position of the summons which in these circumstances reaches the practitioner, it is in effect and substance a demand advanced under the provisions of an Act of Parliament, and most certainly it ought to carry a guarantee of payment on the part of some public organisation, say the municipal or local health authorities. Whether these authorities should or should not endeavour to recover from the patient the fee thus paid is a social and economic question with which the medical profession in its

corporate capacity has no immediate concern. The position of the practitioner is that he is called upon to render services by an authority which finds its sanction in the voice of the community as expressed in an Act of Parliament, and that his fee ought to be provided by those who have called this authority into existence. As it is, the practitioner is placed in the difficult position either of having to refuse to attend, or to attend with little or no prospect of being paid for his services. The summons, when it arrives, is in itself a proof that a critical position has arisen, and the natural and humane instincts of every medical practitioner prompt him to render aid without a too careful consideration of the question of fee. Yet such a course may mean not only the absence of remuneration, but also the neglect of his own patients and practice and the risk, in the case of puerperal fever, of inability to accept private midwifery engagements for a considerable period of time. The community has no right to place these demands on any of its members, and still less to advance them without a guarantee that they shall be adequately remunerated. Of course, it is true that a medical man is not legally compelled to attend to the summons of a midwife. We not only admit this, but we say that there are circumstances in which, in justice both to himself and his patients, he ought to refuse such a summons. Yet though choice rests with the practitioner, there are conditions under which refusal is almost impossible, except at the risk of public odium. And in either event the essential position is not modified.

There is another aspect of the situation which the medical profession must keep in view. It is certain that many members of the profession do not desire, altogether apart from the question of fee, to be called to cases under the Midwives Act. Others may be quite willing to accept these cases. There may thus be the necessity of arranging in each locality a list of practitioners willing to work under the Act, and the midwives might be compelled to summons these according to a system of rotation. Possibly some may consider that the best thing is to appoint in each district one medical officer as a kind of municipal accoucheur and to restrict the practice of such an officer to work under the Midwives Act. Here there is room for some difference of opinion, but there is no such possibility in reference to the main position discussed in this article.

ANNOTATIONS.

The Sanitary Evolution of London.

MR. HENRY JEPHSON, a member of the London County Council, has recently published a book under this title, and in its pages may be found many facts of great social and economic interest and importance. Proclamation has been made on high authority that worthy service to the community may be rendered in the municipal not less than in the Parliamentary sphere, and there is abundant evidence in Mr. Jephson's book in support of this proposition. Taking the questions which especially appeal to the professional interests of our readers, we find, first, figures to show that within fifty years the death-rate in London has decreased from 23.38 to 17.1 per 1,000. This improvement is attributed principally to developments in the perfecting of the sanitary arrangements. The sanitary system includes nearly 90 miles of great intercepting and outfall sewers, 176 miles of main sewers, 26 miles of relief sewers, and more than 2,600 miles of local sewers. The amount of sewage dealt with per annum is said to equal a lake 11 1-5 feet deep and having an area of 44 square miles. Another piece of official machinery by which the health of the community is safeguarded is the inspection of food. In this respect the figures show that at Smithfield, in 1905, out of 415,000 tons of meat received, 2,128 tons were condemned as diseased or unsound; and at Billingsgate, 674 tons of the 211,600 of fish received, as well as 173 tons of tinned meat, were rejected on inspection and were ordered to be destroyed. It is calculated that the cost of disease in the Metropolis equals half a million sterling per annum, and this does not include the loss to the individual in wages or to the family by the incapacity of the breadwinner. Emphasis is laid on the necessity of improvement in domestic sanitary accommodation in many directions. There are even yet 304,874 persons who live in one-room houses, and 701,203 in two-room houses, and the death-rate under such conditions is proved to be abnormally high.

The Royal Society of Medicine.

THE movement for the amalgamation of the metropolitan medical societies has now begun to take definite shape, and at a recent meeting of the members of those societies which have officially intimated their adhesion to the scheme it was decided that the new organisation should be known as "The Royal Society of Medicine." We repeat our opinion that gratitude is due from the profession to those who have worked steadily and energetically to bring the amalgamation scheme to a successful issue. An organisation which will bring into close association, and for their mutual benefit, those who are working in the various departments of medicine is specially needed when, as at present, there is an increasing tendency to special practice. This tendency is inevitable, and to quarrel with it is useless. It arises from the very nature of things. But care can be taken to safeguard its developments and to prevent the dangers which are carried in its train. The amalgamation scheme will, we anticipate, be

active in both these directions, and for this reason alone, and apart from others, it seems to us to deserve the support and goodwill of all interested in the progress of the science and art of medicine. Unfortunately, some of the more important societies have declined formally and officially to support it. But this by no means implies that all the members of these societies will stand aloof. On the contrary, many of these will doubtless join the new society, and it seems desirable that this fact shall be recognised at the earliest possible date. Though there may be official indifference, there will be many personal adhesions when the new organisation appeals directly to the profession.

The Registrar-General's Report.

THE sixty-eighth annual report of the Registrar-General deals with the births, deaths, and marriages which took place in England and Wales in 1905. It is, of course, a document of much interest and of high economic and national importance. In this brief reference to it we purpose merely to quote some few figures which bear upon subjects that have often been discussed in our columns. First, with regard to the birth-rate, it must be noted that the figures reach the lowest level that has been recorded since civil registration was established. The decline has been almost continuous since 1876, and the serious aspect of the question receives further emphasis from the fact that, with the single exception of France, the fertility of married women in England and Wales is now less than that of any European country. The conclusion is reached that, after allowing for a decrease in the proportion of married women of conceptive ages, and for a diminution in the number of illegitimate births, some 73 per cent. of the decline is due to the "deliberate restriction of child-bearing on the part of the people themselves." To the grave significance of such facts as are now placed on official record we have more than once directed attention. Turning next to the record of deaths, the report presents a more encouraging picture. The total number of deaths registered during the year was 520,031, or in the proportion of 15.2 per 1,000 persons living. This is the lowest rate on record, and is 8.2 per cent. below the average of the previous quinquennium. Regarding individual causes of death, tuberculosis was during the year responsible for 55,759 deaths, being fewer by 7,870 than the average annual number in the previous decennium. Under cancer, on the other hand, the numbers are 30,221, or more by 2,209 than the average number in the previous ten years. One other fact may be noted. It is that no death from hydrophobia has been recorded since 1902—an excellent illustration of the preventive treatment of disease. As a contrast, it is noteworthy that in the official returns for London and seventy-five other great towns for the week ending February 9, 1907, no fewer than 14 infants were suffocated in bed—a cause of death that, as we have often pointed out, could be almost absolutely prevented by the adoption of common-sense precautions.

MEDICAL OPINION AND MOVEMENT.

THE terrible havoc of disease that was wrought in our South African Forces owing to the utter lack of proper measures of sanitation and the ignorance displayed by the military authorities on the subject has been brought into vivid contrast with the experience of the Japanese Army in Manchuria. The War Office at last shows signs of an awakening intelligence in the matter, and evidently intends to profit by the lesson, and to include sanitation amongst the other measures of reorganisation which are making themselves manifest. The Army Orders for February make provision for instruction of the officers, and also of the non-commissioned officers and men, in sanitation. An official text-book on military sanitation is to be issued and annual courses of lectures are to be given. Special classes are to be given to officers at the Aldershot School of Army Sanitation, and other classes are to be arranged for regimental non-commissioned officers and men. An examination in sanitation, based upon the official text-book, will be included in the final examination of cadets in the senior division after March 1, 1908. Furthermore, on mobilisation a sanitary inspection committee is to be formed for service in the field. Its duties will be to superintend the provision of all sanitary appliances and materials, to assist officers and the Medical Service to maintain the health of the Army, to initiate schemes of general sanitation, to inspect stations occupied by troops, and to further in every way the maintenance of sanitary conditions.

THE state of shock and the causal factors underlying it form a subject of considerable interest to the physiologist, and have also become one of practical importance to the surgeon. In recent years the matter has been very carefully studied by Dr. G. W. Crile, and his work and the conclusions he arrived at have been confirmed by Mr. J. P. Mummery and others. Briefly expressed, these authors hold the view that the condition of shock consists essentially in an exhausted state of the vaso-motor centres, giving rise to a general paralysis of the blood-vessels throughout the body and a consequent fall of blood-pressure. Mr. J. D. Malcolm raises the question anew, and in a paper read before the Royal Medical and Chirurgical Society contends that the essential factor involved in shock consists in a general constriction of the blood-vessels. He brings no new facts or observations in support of his theory, but is of opinion that it is a more proper interpretation of the facts already known. This opinion was not shared by any member of the Society who took part in the discussion, and is, we think, hardly likely to receive any general support. It is difficult to understand, for instance, his contention that a general constriction of the blood-vessels would give rise to a fall of blood-pressure. It is surely sufficiently well established by the laws of physics that any general constriction of the blood-vessels causes increased resistance in the flow of blood, which must be accompanied by increase of blood-pressure behind that resistance. Mr. Mal-

colm appears to lay much stress on the fact that in shock the peripheral vessels are empty; but, as Dr. A. P. Beddard pointed out, this is secondary to the fall of blood-pressure, and the accumulation of the blood in the large veins of the splanchnic area.

THE question of compulsory vaccination gave rise to an animated debate in the House of Commons. Mr. Lupton moved an amendment to the address in favour of the abolition of the penal clauses of the Vaccination Acts, and elicited a promise from Mr. Burns that a Bill would be introduced by which it will be possible to obtain exemption from vaccination by a statutory declaration. The penal clauses have undoubtedly received varying interpretations in different parts of the country, and the conscientious objector has received somewhat harsh treatment at the hands of magistrates in certain districts, while in others compulsory vaccination has been in name only. The Bill now to be introduced will mete out the same treatment all over the country, but there is danger lest its effect will be to so simplify the way to exemption from vaccination as to annul the force of the original Act altogether. It might have been supposed that the overwhelming evidence which the profession has ready to hand in favour of yet more stringent measures for vaccination and re-vaccination of the community might have reached the intelligence of our legislators and helped them to form opinions on the subject in conformity with the facts. On the contrary, it is well known that there is a large contingent in the House in favour of the abolition of compulsory vaccination altogether. Their knowledge on the subject may be judged from their spokesman on this occasion, who referred to vaccination as "the most wicked invention of opening a vein, cutting through the skin, and putting into it pus from a diseased cow." Under the circumstances it seems probable that vaccination is doomed to receive a considerable set-back in this country until some serious outbreak of the disease again brings vividly before the mind of the community the horrors of the malady.

CEREBRO-SPINAL fever shows no sign of abatement at the two centres, Glasgow and Belfast, where it is most prevalent. Fresh cases are reported daily, and the mortality is very high. Further outbreaks of the disease are reported in several Scotch and Irish towns, and during the past week there have been sporadic cases in different parts of the country and also in London. On the recommendation of the Public Health Committee, the London County Council has decided to make the disease notifiable in the administrative county of London for a period of six months. The Local Government Board has issued a circular to sanitary authorities on the subject, pointing out that should groups of cases of illness at all resembling in nature cerebro-spinal fever occur in any district, the fact is to be reported upon specially by the medical officer of health, and a copy of the report sent to the board. Accompanying the circular is a copy of the memorandum of the disease drawn up in 1905 by Mr. W. H. Power, Medical Officer to the Board.

HOSPITAL CLINICS.

APPENDICITIS: ITS SPECIAL FEATURES IN CHILDREN.

By J. P. LOCKHART MUMMERY, F.R.C.S. Eng., Surgeon King Edward VII. Hospital, and Assistant Surgeon to the North-Eastern Hospital for Children and St. Mark's Hospital for Fistula, etc.

Lecture delivered at the Polyclinic, January 1907.

APPENDICITIS in children presents several important points, both in diagnosis and treatment, in which it differs from the same disease in adults. It is very uncommon under two years of age. Only a very few cases have been recorded of children who have been operated on for appendicitis at 20 months and 22 months. It is much more common after six years of age, and in Paris it appears to be more frequently met with in children than in adults. In London adult appendicitis is the more common.

The diagnosis of appendicitis in children is difficult, as children often have curious and misleading symptoms, and there is much greater variation in the symptoms than we find when appendicitis occurs in adults. It tends to run a much more rapid and acute course, the gangrenous form is much more common, and general peritonitis is a more frequent complication. The whole inflammatory process is more rapid in children, and there is not the same tendency to the formation of adhesions and to localisation of the products of inflammation that we are accustomed to see in adults.

THE DIAGNOSIS.

We are obliged in children to depend very much less upon the patient's history and the account of the attack, and in some cases little or nothing can be learned. Gastric and abdominal pain, sickness, and diarrhoea are comparatively common affections of childhood, and it is not possible to get any reliable account of symptoms which point to appendicitis. Many people seem to think that "stomach-ache" is natural to children, and no special attention is paid to it.

Most children when ill are suspicious and intolerant of strangers, and resent examination unless it is most tactfully carried out. It is advisable, therefore, first of all, to ascertain from the mother or relations as much as possible of the child's history and the account of the present illness, and not to start by asking the child questions. It is important to observe the position in which the child lies. Notice whether the right thigh is drawn up, and, if so, gently straighten it and see if the child resents this and if it is again immediately flexed. It is best in a case of suspected appendicitis to proceed at once to examine the abdomen, as this is the important part of the examination, and it is advisable to investigate this before the child is tired of being examined. We may observe whether the abdominal wall moves with respiration or not, and may notice its general appearance. One of the most important points is to observe whether there is rigidity of the right rectus and other abdominal muscles. Rigidity of the muscles is a most important sign of intra-abdominal mischief, and I think ranks first in this particular.

Tenderness over the cæcum is also important, and we should observe whether on gentle pressure in this neighbourhood the abdominal muscles attempt to protect this part, and this observation should be compared with the facts of the opposite side. Of course if there is a definite tumour to be felt this assists the diagnosis very considerably. In a case I attended recently, however, this proved misleading.

The patient was a child, aged seven, who was sent to the hospital as a case of appendix abscess. On examination there was rigidity on the right side of the abdomen, and a large round tumour, which was very tender, could be felt on the right iliac fossa. There was a history of sickness and constipation, and of sudden onset of pain; the temperature was raised and the pulse was quick. Everything pointed to the diagnosis being correct, and I decided to operate. On opening the abdomen over the swelling, instead of finding an abscess, as I had expected, I found a large loop of semi-gangrenous bowel which proved to be a volvulus of the small intestine just above the ileo-cæcal valve.

Distension of the bowel is as a rule an important indication of a serious lesion, and shows that the condition has already reached an advanced stage. It often means that general peritonitis is present. The absence of distention, however, means little. The temperature is not of much importance, and personally I attach much more importance to the pulse. A quick pulse is, I believe, of the greatest importance as a sign of serious illness in children.

In children evidence of the greatest value can often be obtained by a rectal examination, and this important means of making a diagnosis should never be neglected. Many people, I think, do not seem to realise how large a part of the abdominal cavity in children can be felt by a finger in the rectum. Even a small baby's rectum will easily accommodate an ordinary sized man's finger without any fear of damage; and the whole of the pelvic organs, and in young children even the kidneys, can be felt quite easily through the walls of the sigmoid flexure. If necessary a little anæsthetic may be given, and in this way a thickened appendix or an abscess can often be felt when it could not be made out through the rigid abdominal wall. Lastly, in a difficult case one can often clear up the diagnosis by sitting quietly by the child's bedside for some time and watching it. One often gets a much clearer idea of the real condition of affairs in this way than is possible in a single examination.

As a rule the diagnosis of acute appendicitis in a child is not a difficult matter, but there are certain conditions in which there is extreme difficulty experienced in arriving at a correct conclusion, and in some cases it is quite impossible. Perhaps the most difficult cases are those where there is pneumonia

with abdominal symptoms. The onset of the attack and the symptoms may closely resemble acute appendicitis or even peritonitis. In doubtful cases the chest should always be carefully examined for physical signs; if the physical signs of pneumonia are discovered the diagnosis is not difficult. The greatest difficulty, however, arises in those cases where the pneumonic process commences in the centre or near the base of the lung, and in which there is diaphragmatic pleurisy. In such cases it may be impossible to make a correct diagnosis until some days after the onset of the attack. Intestinal worms may also cause symptoms which closely resemble acute appendicitis; there may be fever and vomiting, and the diagnosis is only cleared up by the discovery of the worms in the evacuations. In typhoid with a sudden onset the diagnosis may also be difficult.

Considerable difficulty arises in those cases in which the child has symptoms of an acute peritonitis. Tubercular peritonitis with an acute onset, or which has not been diagnosed before acute symptoms have shown themselves, may closely resemble appendicitis. A rectal examination is here often of value. Fortunately a mistake in diagnosis is not of any serious import, as beneficial results usually follow laparotomy in these cases. Pneumococcal and gonococcal peritonitis may also give rise to difficulties, and an operation in these cases will do harm. Gonococcal peritonitis occurs exclusively in female children, and is a complication of vulvo-vaginitis, the infection having spread up the tubes. A rectal examination will usually enable these cases to be diagnosed, as the tube can be felt to be thickened and inflamed; the presence of vulvitis is also significant.

Chronic appendicitis in children is probably much commoner than is generally supposed. It is generally overlooked and the symptoms attributed to other causes. Many of the acute intestinal disorders of children which are accompanied by a rise in temperature, a general febrile disturbance, and abdominal pain and tenderness are subacute attacks of appendicitis. Often these attacks occur at frequent intervals, and the mother attributes them to the fact that the child has delicate bowels or a weak stomach and treats them herself without reference to a doctor. The attack usually subsides in a day or two; only, however, to recur again from some insignificant cause, until ultimately a more severe attack than usual occurs and an abscess forms. I think that we should always think of appendicitis when we see a child who has frequent attacks of colic accompanied by febrile symptoms. I have seen several cases of children who have been sickly and delicate with frequent alimentary troubles, and who, after the appendix has been removed, became strong, healthy children.

INDICATIONS FOR OPERATIONS.

It is now, I think, agreed that in all cases of appendicitis in children, when a definite diagnosis has been made, an operation should sooner or later be performed for the removal of the appendix. There is still considerable difference of opinion as to whether the operation should be done at once

or delayed until the acute attack has passed off. French surgeons advocate that, except in those cases when the operation can be performed at the very commencement of the attack, we should, whenever possible, wait till the acute symptoms have passed off. This seems at first very good advice, but the whole question resolves itself into one of diagnosis. If we can be certain that there is not a localised abscess which may, if left alone, burst into the peritoneal cavity, or a gangrenous appendix which, if not immediately removed, must quickly prove fatal, by all means let us wait. It is generally not very difficult to tell whether there is a localised abscess, but unfortunately it is often impossible to be certain that there is not a gangrenous appendix. Unfortunately, also, the proportion of acute gangrenous cases is larger in children than in adults, and the diagnosis is more difficult. We so frequently see cases in which a gangrenous appendix has not been operated upon early enough that I think we must be very careful before we accept this axiom in practice, though we may agree with it in theory.

No absolute rule can be made, and each case must, within certain limits, be treated upon its merits. If all the local signs are slight, and, in addition, there is not and has not been much rise in temperature, if the pulse is not fast and the general constitutional symptoms are not severe, it will probably be quite safe to wait till the attack has passed off before performing the operation. If, however, the pulse is very fast and remains so, and the constitutional symptoms are severe, even though there is no sign of swelling over the appendix and not very marked tenderness, immediate operation is, I believe, the safest procedure. If there are signs of abscess, operation is, of course, indicated at once. No one would now think of leaving an abscess unopened, either of the appendix or anywhere else. Most surgeons in this country agree that the immediate operation is the safest treatment for appendicitis in children, except in those cases where there is a reasonable certainty that a gangrenous appendix or abscess does not exist. And it is better to err on the side of operation at once than to leave a gangrenous appendix or an abscess to burst into the peritoneal cavity. Children, as a rule, recover rapidly if operated upon before general infection has occurred; but the prognosis is most grave after such infection is once established.

I cannot remember ever having seen a case in which serious harm resulted from immediate operation in a case of appendicitis in a child, but I have a most vivid recollection of several cases where a child's life was lost through delaying the operation. I remember one case in particular in which the operation was performed in spite of the medical opinion being in favour of delay, and the child's life was certainly saved. The patient was a little girl of seven. She had had a sharp attack of appendicitis, and had been ill for two or three days. The doctor thought it advisable to send for the surgeon, but in the meantime the child quite suddenly got very much better. When we saw her the pain had disappeared, the temperature had come down a great deal, and the child was quite cheerful, and

said she was much better. We arrived, in fact, to find everybody congratulating themselves that, after all, the operation would be unnecessary. On examining the child, however, there was still some tenderness over the appendix region, and the pulse was still very fast. It was therefore considered safer to perform an immediate operation. On opening the abdomen a large abscess containing four or five ounces of pus was discovered, which appeared to be on the very point of bursting into the peritoneal cavity. This was drained, and the child made a good recovery. What had probably happened was that the walls of the abscess had commenced to stretch and give way, and the tension had thus been relieved; this had temporarily stopped the pain, and by diminishing the absorption of toxins had brought down the temperature. Delay in this case would almost certainly have proved fatal.

THE OPERATION DESCRIBED.

The most important factor in operations upon children is that of time. Children *will not* stand long operations, and it is of the utmost importance to operate as rapidly as possible and to do as little as possible. For this reason if we are dealing with an acute appendix abscess we should be content simply to open and drain it, and no attempt should be made to remove the appendix unless it can be got out quite easily and without unduly lengthening the operation. It is much easier to do too much than too little when operating on children.

The greatest care should be taken to keep the child warm during the operation and not to expose the abdomen to cold more than can possibly be helped. Personally, I prefer ether or C.E. mixture to chloroform for the anæsthetic, as it has a less depressing effect upon the central nervous system. The incision should whenever possible be made so that the muscles can be separated and not cut across. If the muscles are cut across there is considerable danger of ventral hernia, as the incision, as compared to the size of the child, is often necessarily a large one. A very good plan in applying the dressings is to put two broad pieces of strapping round the body so as to hold the dressing at the top and bottom; besides preventing the dressings from shifting, it has the additional advantage of supporting the abdominal wound and preventing the stitches from cutting through, while at the same time it does away with the necessity of a light binder, which is very liable to embarrass the respiration.

If the appendix has not been removed at the operation it is always advisable to warn the parents that a second operation may be necessary later on. In many cases when an abscess has formed and been opened the appendix gives no further trouble, but this cannot be depended upon. Fresh attacks of appendicitis may occur, and if the parents have not been warned of this they not infrequently think that the operation, which was not done to remove the appendix, but to save the child's life, was badly done. I recently operated upon a girl who had an acute appendix abscess opened, by which I have no doubt that her life was saved. Un-

fortunately her parents were led to suppose that there would be no further trouble after the wound had healed. The child, however, had five subsequent attacks of appendicitis, and I removed a very much diseased appendix which had a tight stricture at the site of the earlier perforation. When general peritonitis has already occurred the results of operation are very bad and only a very few cases recover. An operation should, however, always be done, as a certain number of cases do recover after operation, while without operation recovery is almost impossible. In such circumstances the operation should consist of free incisions and the establishment of good drainage both of the appendix area and the pelvic pouch. It is particularly important in these cases to make the operative procedure as brief as possible.

AFTER-TREATMENT.

Careful after-treatment is always of great importance and is, I believe, by no means the least important part of the treatment of any operation case. The after-treatment is specially important in children, as on it, recovery in bad cases often depends. If there is any shock present after the operation the foot of the cot should be well raised and a warm water enema given. The child should be well covered up and kept warm, but a mistake which nurses frequently make, and which one should always look out for, is to allow heavy bedclothes to rest upon the child's chest. Free respiration is of the greatest importance to children, and in children the respiration is mainly abdominal. Abdominal breathing is seriously interfered with by the weight of bedclothes. All weight should be entirely taken off the thorax by a cradle, and there should be nothing but a light flannel nightgown over the chest.

Children stand starvation very badly, and it is therefore necessary to begin feeding them as soon as possible after the operation. I give albumen water made from eggs, and sugar, both of which are very good diets. The bowels should be opened as soon as possible by a dose of castor oil, given 24 hours after the operation, or in some cases earlier than this. Enemas are also useful. If the bowels do not act at once an oil or turpentine enema should be given, and the castor oil repeated if necessary. In bad cases, especially when there has been general peritonitis, everything depends on getting the bowels open, and energetic measures in this direction are often necessary.

Children should not be fastened down in bed or kept in one position after the operation. They do much better if allowed to move about within reason. A child, if left alone, will quickly try and get into the most comfortable position, and that of necessity will be the position of greatest rest, and therefore the best. Nature is the best guide in this matter, and a child, when seriously ill, will not try to sit up, and if its little movements are restricted will only fret and tire itself out in trying to move; while if it is helped into the position wanted will often fall asleep at once. Stimulants, and especially strychnine, must be used with the greatest caution in children, and in most cases are best avoided.

POINTS IN TREATMENT.

PARALYSIS AND SYPHILIS.

The Time after the Primary Chancre at which Cerebral Syphilis and General Paralysis of the Insane are most Liable to Occur.

CEREBRAL syphilis may occur within a year of the primary sore; on the other hand, it may be postponed for forty years. The question arises: At what time is it most likely to occur? Is it more likely to occur late or early? Professor Fournier's analysis of 223 cases of *cerebral syphilis* with hemiplegic result shows most clearly that the liability to this form of cerebral syphilitic affection is *at its height three years after the chancre*, and that the great majority of the cases occur within seven years of infection. Out of the 223 cases—

- 25 occurred within 1 year of the chancre.
- 26 occurred between 1 and 2 years after the chancre.
- 39 occurred between 2 and 3 years after the chancre.
- 29 occurred between 3 and 4 years after the chancre.
- 20 occurred between 4 and 5 years after the chancre.
- 9 occurred between 5 and 6 years after the chancre.
- 13 occurred between 6 and 7 years after the chancre.

i.e., 161, or 72 per cent., within seven years after the chancre.

A similar analysis of 112 cases of *general paralysis of the insane* shows that the tendency was *at its height during the tenth year after the chancre*. No case occurred during the first or second years, whilst there were increasing numbers each subsequent year up to the tenth, after which there was a rapid decline. Thus—

- During the seventh year after the chancre there were 8 cases of general paralysis of the insane.
- During the eighth year after the chancre there were 10 cases of general paralysis of the insane.
- During the ninth year after the chancre there were 10 cases of general paralysis of the insane.
- During the tenth year after the chancre there were 15 cases of general paralysis of the insane.
- During the eleventh year after the chancre there were 12 cases of general paralysis of the insane.
- During the twelfth year after the chancre there were 11 cases of general paralysis of the insane.
- During the thirteenth year after the chancre there were 5 cases of general paralysis of the insane.

i.e. 64 per cent. of the cases occurred between seven and thirteen years after the chancre. The dates at which syphilitic thrombosis and general paralysis

of the insane respectively are most likely to occur are therefore very different from one another; perhaps the accompanying diagrammatic curves may illustrate this more clearly still.

It is not those cases in which the primary and secondary symptoms are most severe that are most liable to be followed by cerebral syphilis or by general paralysis; these may follow even though the earlier symptoms were quite slight. It is possible that this may depend upon the less radical treatment that the slighter cases are liable to receive. If there is one thing certain about syphilis it is that if later troubles are to be prevented, treatment must be persevered with for a long while after the chancre, and this applies as much to the mild cases as to the severe. The common practice is to persevere assiduously with mercurial treatment for two years after the last noted symptom, and then to desist in the belief that the cure is complete. Cerebral syphilis and general paralysis, however, may occur in spite of this, and, owing to the maximum liability to parasymphilitic affections (*tabes dorsalis*, G. P. I.) beginning about the sixth year and being greatest about the ninth or tenth years, Professor Fournier lays stress on the necessity to repeat the mercurial treatment in the fifth and in the eighth years, especially in cities, in which, owing to business activity and anxiety, with consequent wear and tear of the brain, general paralysis of the insane is more likely to occur than it is elsewhere. The leading French authorities suggest that, subject to modifications according to the necessities of each particular case, the course should be as follows:—

During the first and second years, vigorous mercurial treatment with short intervals.

During the second and third years, therapeutic repose.

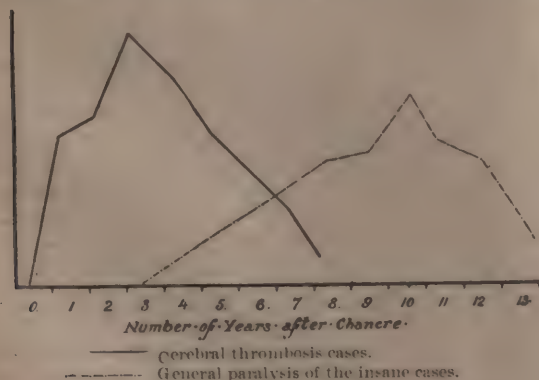
During the fifth year, vigorous mercurial treatment again.

During the sixth and seventh years, therapeutic repose.

During the eighth year, vigorous mercurial treatment again.

After this no further treatment, unless some special occasion should arise, is needed. It seems worth while to bring this French scheme of treatment before English practitioners, for it is far more radical than that which is usually adopted in England. It is to France that many English patients are sent for the cure of late syphilitic affections, and French methods may well be adopted here.

It may further be remarked that the French do not regard potassium iodide as a preventive of late symptoms of syphilis; potassium iodide will cure gummata very readily, but it is well known that gummata may develop even during the administration of potassium iodide. The iodide will put them away again, but few syphilitic affections other than actual gummata are cured by potassium iodide. The French have little or no faith in the drug as a preventive; it is upon mer-



cury that they mainly rely. After mercury has once been given in quantity, there is evidence to show that much of it remains stored in the bones. The giving of iodide may liberate some of this mercury, in which case the patient is virtually being

given mercury though there is only potassium iodide in his medicine. Nevertheless the French teaching is that whether potassium iodide be given or not, there is no stage of syphilis at which it is too late to administer mercury.

THE STANDARDISATION OF DIGITALIS PREPARATIONS.

It is probable that, of all cardiac tonics, digitalis is the best we have, and it is the most widely used. Many lives have been saved, or at least prolonged, by it. It is of vital importance that the drug should contain its full quantity of active principles. Nevertheless it has been shown conclusively, by Dr. W. E. Dixon and others, that a great deal of the tincture of digitalis as obtained upon the market is extremely weak, and some of it is even quite inert. This is not due to any fraud or error on the part of those who manufacture the tincture, which may, indeed, have been made in the orthodox way from apparently the best foxglove leaves, and yet the result may be little more than a coloured solution of alcohol. This apparently depends upon the fact that there is very great variation in the amount of active principle in different specimens of foxglove leaves, and until recently there has been no means of distinguishing the active leaves from the inert. No doubt the differences depend upon such conditions as the time of year at which the leaves are gathered, or the nature of the soil upon which the plants have grown—factors which can be controlled; but they also seem to depend upon certain uncontrollable factors, such as the amount of sunshine there has been whilst the plant was growing, the amount of moisture in the air, the amount of moisture in the soil, the temperature, and so on. Leaves gathered from similar plants, in the same locality, at the same season, but in different years may vary widely in their respective therapeutic values. It is possible that those who have used tincture of digitalis in full doses without benefit, or even perhaps with apparent ill-effects, have been supplied with a deficient or inert sample, so that the patients have been getting either very little real digitalis or even none at all. The chemist who supplies the ordinary tincture cannot guarantee its efficacy. However well the tincture may have been prepared, and however fresh it may be, the chemist, in the case of the B.P. tincture, can only guarantee that it has been prepared from apparently good leaves according to the official formula. Neither the chemist nor the doctor can tell beforehand that the required active principle is present.

This is a very serious matter. In many of the cases in which the drug is needed, the conditions are too urgent to allow time for experimenting on the patient to find out whether this or that sample of digitalis is the more active. The activity of any given sample should be known with certainty beforehand. In other words, the preparations of digitalis, to be ideal, should be standardised.

At first sight such standardisation sounds easy. There are many drugs which are standardised already; for example, nux vomica and opium. These and others are standardised by chemical analysis, the

amount of active principle being directly estimated. Why not standardise digitalis in the same way? Attempts to do so have been made repeatedly, and many so-called active principles, such as digitalin, digitoxin, and so on, have been prepared. These, however, are mostly of much less benefit to patients than are the liquid preparations of the crude drug, and the chief cause of this is the fact that the active principle of foxglove is not an alkaloid like strychnine and morphine, but a *glucoside* which, like other glucosides, *decomposes when attempts are made to dry it*. In consequence of this it has been found practically impossible to standardise digitalis by any chemical means. The question arises: Is there no other method of standardising the drug? The answer is: Yes, there is; there is a *physiological* method. A physiological method of standardising therapeutic preparations is by no means new. It is well known in the case of antidiphtheritic serum, where guinea-pigs are used for the purpose. Dr. Dixon has devised a somewhat similar method for digitalis, using pithed (*i.e.* not living) frogs as the physiological medium. He has determined what is the minimum quantity of a standard tincture or infusion of digitalis that, injected into an average frog, will cause the heart to stop beating. Using this as a basis of comparison, he obtained samples of digitalis preparations from various sources, and determined what was the least dose of each that would similarly stop the heart. He frequently found that more than twice the standard minimum dose was needed; in other words, the tinctures as bought contained less than half the active principle they should have contained. It will be obvious that the dose should be at least twice as large with these as with the standard tincture—*i.e.*, at least 30 minims would have to be administered to produce the physiological effect expected from 15 minims of the standard preparation. Expressed in another way, the dosage cannot be arbitrarily laid down as a uniform quantity for all tinctures of digitalis, but rather the dose will vary with each brew of tincture. After it has been determined physiologically in frogs, the dose can be stated on each bottle, to the effect, for example, *that* "to produce the physiological effect of a standard 15 minim dose it is necessary to give 30 minims (or 20, 25, 35, 15, and so on, as the case may be) of this particular tincture."

There are many firms who now standardise their digitalis preparations in this way. The cost is, of course, slightly more for the standardised than for unstandardised medicines; but seeing how important it is to have efficient preparations, the fact that physiologically standardised digitalis is obtainable cannot be too widely known to the medical profession.

It may be added that digitalis is not the only glucoside drug which is now standardised physiologically. *Strophanthus*, squill, *cannabis indica*, and ergot, may all be obtained standardised in a similar way. None of these can be standardised by chemical analysis for the reasons stated above, but it is possible to determine the relative physiological strengths of different preparations of each of them; and this is particularly important in the case of ergot, so many samples of which are practically inert.

A point in regard to the vomiting which so often follows the administration of tincture of digitalis is worthy of note. Tincture of digitalis is frequently prescribed in a mixture along with *nux vomica*, or strychnine, or caffeine, and so on. If vomiting should follow, prescribe the tincture of digitalis quite by itself in pure water, and vomiting will

almost certainly cease, even when full doses are given. It is when it is given simultaneously with other drugs that digitalis is liable to cause vomiting.

It is also worthy of note that digitalis does not act rapidly upon the heart. It takes time to develop its full effect. One of the best indications of improvement in a failing heart is an increase in the amount of urine passed. It will usually be found that the urine does not materially increase in quantity until the third or fourth day after the administration of digitalis has been begun. In other words, it takes from three to four days before the digitalis begins really to relieve the cardiac failure. This being so, it is obvious that digitalis by itself is not the drug for an acute cardiac emergency, and it helps to explain why digitalis acts so much better in failure from mechanical lesions of the valves than it does in cases of, for example, acute pericarditis, or acute fevers such as pneumonia or typhoid fever.

PRACTICAL NOTES ON DIAGNOSIS AND TREATMENT.

Bone Marrow in Pernicious Anæmia.

THE red marrow may be taken direct from a long bone of the ox in teaspoonful doses with a little salt, or it may be made into sandwiches. It may also be obtained in tablet form or in a solution in glycerine. But the fresh marrow is to be preferred. *Dr. W. Miller Ord.*

Senile Pruritus.

MANY cases of senile pruritus to which no cause can be assigned beyond atrophy of the skin, can be relieved by tincture of *cannabis indica*, beginning with 5 and increasing to 20 or even 30 minims thrice daily. The remedy should be well diluted and taken after meals. Another useful agent is pilocarpine, which should be given by subcutaneous injection and may be continued for weeks or months. —*Dr. H. G. Adamson.*

Ethyl Chloride.

ETHYL CHLORIDE is the best anæsthetic known for single-dose cases—namely, those in which anæsthesia is induced, the mask removed, and the operation performed without any further administration. This is more particularly true of children. In operations for enlarged tonsils and adenoids ethyl chloride is destined to save many lives. The chloroform mortality in these operations is exceptionally high, over a hundred deaths occurring in these circumstances in Great Britain between 1890 and 1900.—*Mr. J. H. Chaldecott.*

Oatmeal in Diabetes.

THE oat cure consists in the daily administration of 200 to 250 grammes of oatmeal, best given in the form of gruel every two hours; 200 to 300 grammes of butter and often about 100 grammes of vegetable proteid, or a few eggs may be taken in addition. Nothing else is allowed except black coffee at tea, lemon juice, good old wine, or a little brandy or whisky. At first there may be increase of the glycosuria, but after a few days the sugar diminishes and the acetonuria still more so. The treatment has been found to give the best result in severe cases.—*Professor Carl von Noorden.*

Bulbar Paralysis.

DIFFICULTY of articulation and dribbling of the saliva are prominent features in bulbar paralysis. Hence it has been said: "When you see a patient come into the room with a slate in one hand and a handkerchief in the other, you may say 'bulbar paralysis' at once."

Prognosis in Mitral Stenosis.

IN many instances mitral stenosis is a condition which causes the patient but little disturbance, even over a term of years, and whilst it necessarily introduces certain risks and dangers, its existence does not invariably demand the grave prognosis often attached to it.—*Sir Wm. Gairdner.*

Treatment of Dysmenorrhœa.

IN congestive dysmenorrhœa the pain does not yield readily to antispasmodics but will sometimes yield promptly to extract of *cannabis indica* ($\frac{1}{4}$ grain) or to a combination of *hydrastis*, *belladonna*, and bromide of potassium or sodium. Efforts should also be made to promote the menstrual flow and to diminish congestion by acting on the bowels, kidneys and skin. . . . In cases of pelvic congestion with cold extremities and cold skin over the body, nitro-glycerine is remarkably effective.—*Dr. Amand Routh.*

Treatment of Eclampsia.

AT once administer a purgative, say, 5 grains of calomel with a drachm of compound jalap powder if the patient is conscious; if she is unconscious, give two minims of croton oil by the œsophageal tube and follow this by an enema. Promote the action of the skin by copious draughts of fluid and by a hot pack or hot air bath; a pint of saline fluid may also be injected subcutaneously into each axilla. Give morphine— $\frac{1}{2}$ grain followed by $\frac{1}{4}$ grain doses if the fit persists. If the patient is in labour empty the uterus as soon as possible. If she is not yet in labour some advocate the above treatment alone, whilst others suggest forcible dilatation and delivery, or vaginal Cæsarean section.—*Mr. Bellingham Smith.*

THE BOOK WORLD OF MEDICINE AND SCIENCE.

PEDIATRICS: THE HYGIENE AND MEDICAL TREATMENT OF CHILDREN. By THOS. MORGAN ROTCH, M.D. Fifth Edition. (Philadelphia and London: J. B. Lippincott Company. 1906. Pp. xxv and 1,060. Price 25s. net.)

PROFESSOR ROTCH'S manual has received wide recognition as one of the most complete of the numerous works dealing systematically with the study of disease in children. In the new edition the reputation of the book is well maintained, and its sphere of usefulness may be expected to be enlarged. As might have been anticipated from the investigations of the author, the subject of infant feeding receives particular attention, and full particulars are supplied of the elaborate care which is necessary to secure a pure milk supply. Detailed information is also given of the system of percentage feeding which Professor Rotch has done so much to extend in America, and to which more attention might with advantage be paid in this country. The illustrations are numerous and effective. As a systematic work of reference the book may be consulted with confidence.

TUMOURS, INNOCENT AND MALIGNANT; THEIR CLINICAL CHARACTERS AND APPROPRIATE TREATMENT.—By J. BLAND SUTTON, F.R.C.S. Fourth edition. (Messrs. Cassell and Co., Ltd. 8vo. Lond. 1906, pp. xii. and 675, with 355 engravings. Price 21s.)

WE welcome a new and revised edition of Mr. Bland Sutton's book on Tumours. It is written so crisply as to make its perusal a pleasure, whilst at the same time it covers so much ground, gives so many references, and contains so much accurate information, as to leave the English-speaking medical practitioner without any excuse for ignorance upon the topics with which it deals. Pathology in the more restricted sense of morbid anatomy has always had worthy exponents in English. Hunter, indeed, had no charm of manner, but Baillie, and after him Paget, gave a grace to the subject by their writings, and this has been admirably maintained by Mr. Bland Sutton. Surgical pathology at the present time is suffering a partial eclipse, owing to the predominance of bacteriological teaching in the medical schools. There can be no doubt, however, that a man who works through, and knows, the specimens in a large museum will give better diagnoses than one who has spent an equal amount of time in a bacteriological laboratory. The claims of the museum were formerly paramount; they are now relegated to a position of secondary importance. Mr. Bland Sutton's book is essentially a museum book. Into it he has skilfully worked the latest investigation on the histology of tumours with the general results of the organised laboratory research for the causative agent of cancer. Interspersed, too, throughout the volume, and in a true Hunterian spirit, are many illustrative observations taken from comparative anatomy and ethnology, for it is only by the widest knowledge that morbid actions can be explained. On all points Mr. Bland Sutton's teaching is sound and thorough, both as to theory and practice. He has no fads, and what he thinks he writes in downright English. He adds to each chapter a short bibliography of papers which can be easily consulted by any reader who has access to a moderate-sized medical library, and by these references anyone who is interested can follow up a particular subject to its source. The present edition contains, in addition to the chapter on the cancer question—to which, by the way, Mr. Bland Sutton might have added some remarks upon the influence of locality on recurrence—some valuable observations on tumours of the ovary and testicle, and a chapter on heterotopic teeth. This chapter well repays perusal. It deals

with ovarian teeth, with the mastoid or tympanic teeth of horses, and with the cervical teeth of ruminants.

The book is excellently illustrated with blocks made for the most part by Messrs. Butterworth from the drawings of Messrs. Berjeau, Balcombe, Lewin, and other artists. More than fifty additional illustrations occur in the present edition. There is a table of contents, an index of tumours, and an index of organs.

INTERNATIONAL CLINICS. Vols. II. and III. Sixteenth Series. (Philadelphia and London: J. B. Lippincott Company. 1906.)

THE issue of these quarterly volumes of illustrated clinical lectures and original articles dealing with the various departments of medical and surgical practice, has now been continued for a considerable number of years, and the editors are to be congratulated on the high standard of merit the publication maintains. With but few exceptions the lectures are all of interest and value and may be read with profit by those engaged in actual practice. Particularly do they appeal to general practitioners, as they include all varieties of professional work and deal for the most part with questions of diagnosis and treatment. A well-planned and clearly-stated clinical lecture has many advantages which a systematic text-book cannot claim. It deals with an individual position and difficulty rather than with general rules and statements, and thus has a note of actuality which is often absent from the less detailed discussions of the text-book. By such lectures, post-graduation study, whatever may be true of the education of students, is most effectively conducted, and we therefore commend the present volumes as well worthy of the attention of all practitioners anxious to increase the efficiency of their work.

NEW APPLIANCES AND THINGS MEDICAL.

[We shall be glad to receive, at our Office, 23 & 29 Southampton Street, Strand, London, W.C., from the manufacturers, specimens of all new preparations and appliances which may be brought out from time to time.]

SCOTT'S EMULSION OF PURE COD-LIVER OIL WITH HYPOPHOSPHATES OF LIME AND SODA.

(SCOTT AND BOWNE, LTD., MANUFACTURING CHEMISTS, LONDON.)

MESSRS. SCOTT AND BOWNE, have sent us a bottle of this well-known preparation. The value of cod-liver oil as a nutrient in wasting diseases of all kinds is perhaps one of the most firmly established of all the dietetic facts derived from clinical experience. The reason why cod-liver oil should be so superior to other fats of almost identical composition is by no means explained, but according to some authorities depends upon the fact that it contains traces of certain basic principles, among which we may mention jecorine. The preparation before us consists of an emulsion. An emulsion of an oil as compared with the oil itself has two advantages, the first is, it has a pleasanter taste; and the second, that it is slightly more digestible. All fats before absorption must be emulsified, and therefore an emulsion is to some extent a pre-digested food. Scott's emulsion, in addition to cod-liver oil, contains the hypophosphates of lime and soda. There is abundant clinical experience with regard to the value of these drugs in conditions of malnutrition, and their addition to cod-liver oil is certainly to be recommended upon therapeutical grounds. Scott's emulsion has a pleasant taste, and is, as a rule, exceedingly well borne by patients.

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

CURRENT HOSPITAL TOPICS.

The Evelina Hospital Secretaryship.

THERE is a vacancy in the office of secretary to this hospital, the salary of which is £250 per annum. Applications with testimonials must be sent in to the hospital not later than to-day, Saturday, March 2, 1907. We have ascertained that the election is an open one, and that the appointment will go to the best man. The requirements are a good knowledge and experience of hospital administration, sufficient character and administrative ability on the part of the secretary to enable him to occupy a position of independence, whilst maintaining the most cordial relations with the rest of the staff; ability to raise funds; and a knowledge of the business side of hospital affairs so as to secure the maximum of economy with efficiency. We hope that the committee's desire to appoint the best available man will induce other hospitals to co-operate, by encouraging any gentleman known by them to be efficient, to present himself as a candidate for the vacant office. We venture to congratulate the committee of the Evelina Hospital on the wise example they have set by resolving to appoint no one who cannot produce evidence of previous training, an aptitude for hospital management, a good education, and the possession of those qualities which constitute a gentleman.

Hospital Sunday in the Provinces.

SOME interesting figures have been prepared in support of the Hospital Sunday movement in Sunderland. It appears that the total expenditure upon 12,436 patients, of whom 2,745 were in-patients, treated at the Sunderland Infirmary last year was £11,227, towards which the working classes subscribed the handsome sum of £7,038. We are informed that nearly two-thirds of the total expenditure was contributed by the working classes. This is a striking fact, which is greatly to the credit of the working men of Sunderland. It appears to have failed, however, to stimulate the middle-class inhabitants of Sunderland to do their duty by supporting the Sunderland Infirmary. This view is confirmed by the circumstance that Sunderland, with a population of 146,000, according to the last census, only contributed £535 through the Hospital Sunday Fund. Norwich, with a population of only 112,000, subscribed £2,002. Derby, with 106,000 population, subscribed £1,332; and South-

ampton, with 105,000 population, subscribed £1,130 to the hospitals through the Sunday Fund. It is clear from these figures that, for some reason, for which we are unable to account, the classes, who chiefly support the voluntary hospitals in most parts of the country, do not in Sunderland appear to be alive to the importance and privilege of rendering a measure of personal service in the days of health in the cause of the sick. We hope that the energetic action of the *Sunderland Echo* and the infirmary authorities may lead to a development of the Hospital Sunday movement in Sunderland, and that the well-to-do members of this important community may be aroused to take their share in the work of ministering to the least fortunate members who, from no fault of their own, may be overtaken by accident or attacked by disease. We regret to notice that in another provincial town—Leicester—the Hospital Sunday collections last year fell off from £2,202 to £1,982, whereas the contributions from the Hospital Saturday Fund amounted to £10,863, an increase of £600 compared with the previous year. Leicester is a very prosperous town; it is the centre of the shoe trade, and we venture to hope that the Hospital Sunday collections during 1907 will better represent the wealth and importance of this great manufacturing centre.

Central Hospital Council for London.

THIS Central Hospital Council consists of the representatives of fifteen general and five special hospitals in London. Its members collectively number thirty-three, of whom fourteen are members of the medical profession. Each of the large hospitals with a medical school appoints two representatives, with a third in the case of St. Thomas's Hospital, who is associated with the Nightingale School. For several years this Council was comparatively inactive; recently it has taken up two matters which mark a new departure. They are causing some discussion in hospital circles at the present time because they relate to subjects involving legislative action, and to proceedings in regard to the incorporation of a body, the well-being of which is vital to the best interests of all the voluntary hospitals. Some hospitals, we understand, hold the opinion that any representative they may send to the Central Hospital Council can have, and ought to have, no power, without refer-

ence back, to commit his institution to a policy involving legislative action, or to take any step which may cause annoyance or give offence to important officers or supporters of a particular institution or institutions. Underlying this, there is the further principle that no representative of any voluntary hospital should be endowed with powers to support any policy which might entail expenditure, without first obtaining the consent and approval of those whom he represents. There can be no doubt that if this Council is to continue and to prove of practical value, it is essential that its proceedings shall be governed by bye-laws which have received the general approval of the governing authorities of each of the hospitals represented. It is manifestly *ultra vires* for a Council of this kind to promote a Bill in Parliament, for example, without having first submitted that Bill to each of the hospitals concerned. Such a proceed-

ing not only commits every one of the hospitals represented on the Council to a course which they may not approve, at least in form, but it may also involve them in liability, which any hospital committee might consider it undesirable to incur. They might hold, for instance, that hospital funds were not available for the purpose of promoting general legislation, or to pay the expenses of opposition to measures brought before Parliament. A Council of this kind cannot properly speak in the name of the hospitals, where matters of principle or matters of controversy are involved, unless the authority of each hospital represented, to the course of action which the majority of its members may consider it desirable to take, has been obtained. Unless, therefore, they already exist, no time should be lost in formulating by-laws, which will bring the Council and its proceedings into harmony with the feelings and views of the governing bodies, whose representatives constitute the members of the Council.

CONSTRUCTION NOTES.

ASHTON DISTRICT INFIRMARY.

A LARGE balcony has been added to the upper ward in the Children's Hospital. Another improvement has been the laying out and planting of a piece of waste land adjoining the Kershaw Hospital under the supervision of Mr. Samuel Turner, F.R.H.S. During the year the necessity of an additional room for the treatment of out-patients was felt very strongly by the Medical Board, with the result that the passage adjoining the consulting-room has been widened so as to make a second room, and this has been largely used for eye-testing purposes. The machinery of the laundry has been improved, and is now driven by electricity. The governors have had the drives, court-yard, and approaches to various buildings asphalted, and there is now less noise and less discomfort to patients brought by means of vehicles for treatment at the infirmary.

SALFORD ROYAL HOSPITAL.

At a largely attended meeting of the Board of Management of the Salford Royal Hospital, the report of the Extension Committee was presented on the recent competition of designs for the enlargement of the hospital. Mr. Keith D. Young, F.R.I.B.A., who was nominated by the London Royal Institute of British Architects to act as assessor, advised that the three premiums of £50, £30, and £20 be awarded to the authors of designs "F," "D," and "E" respectively, and on the recommendation of the Extension Committee this was adopted by the Board. It was announced that the author of design "F" was Mr. John Ely, F.R.I.B.A., of King Street West, Manchester. The plans sent in by the eight competing architects will be publicly exhibited in due course. The Board decided unanimously that the Extension Committee should issue an urgent appeal for £70,000 to enable them to carry out the complete scheme of extension, which includes the purchase of land.

CHESTERFIELD HOSPITAL.

THE Governors of the Chesterfield and North Derbyshire Hospital have approved a scheme for the extension of that hospital, which is to cost £15,000. The main idea of the scheme is to remove the nursing and domestic staffs

from the hospital proper and build a nurses' home. The space thus set free will be utilised for the accommodation of patients. The piece of land between the hospital and Infirmary Road, given by Alderman Eastwood, J.P., will be utilised for the staff house. The number on the nursing staff requiring housing will be 47, and accommodation will be provided for 56. Among other features contemplated by the scheme are a mortuary and post-mortem room, electric-light installation, a new surgical ward for 17 men, a new anæsthetic room, the enlargement of the women's ward from 8 to 15 beds, a new ward for 21 children's cots, a new observation ward for three beds, a new ophthalmic ward, and a new x-ray room. The changes contemplated will give accommodation for 39 additional in-patients.

SOUTHEND VICTORIA HOSPITAL.

THE water-supply of the hospital has been remodelled and fire hydrants provided. At the last annual meeting it was reported that plans had been prepared and approved for a children's ward to be erected immediately in the rear of the men's ward. Tenders were then got in from local contractors, and that of Messrs. R. Elvy and Son was accepted at £994; to which was added £85 for the removal and rebuilding of the west boundary wall, consequent on the purchase of an additional piece of land 50 feet in width on the west side of the old site. The Committee received an offer from the family of the late Mr. Thomas Dowsett to contribute £1,000, the estimated cost of the children's ward, as a fitting tribute to his memory and in commemoration of his connection with the hospital; in return for which the ward has been named the "Dowsett" ward. For some time past, owing to the increase in the number of patients treated, the medical staff has urged the necessity of enlarging and better equipping the operating theatre and providing an anæsthetic room. A generous offer has been made by Sir Horace Brooks Marshall to equip the theatre with a proper supply of instruments. The Committee accordingly deems it to be an appropriate time to carry out the recommendations of the medical staff, and on plans prepared by Messrs. Greenhalgh and Brockbank, honorary architects, tenders will shortly be invited for the work of enlargement at an estimated cost of £150.

THE NORTH-EASTERN CHILDREN'S HOSPITAL, HACKNEY ROAD, E.

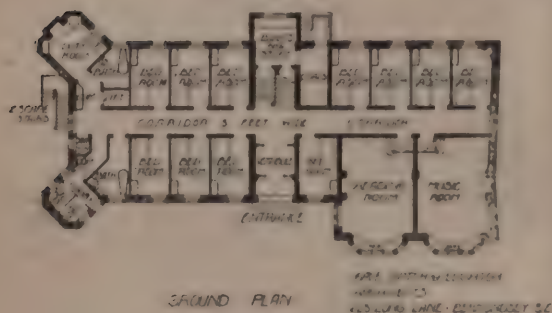
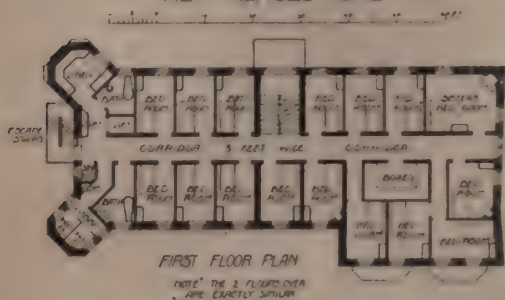
NEW HOME FOR NURSES AND NEW LAUNDRY.

THESE much-needed additions were opened by the Lord Mayor in July 1906. They will certainly prove of great advantage to the staff and to the patients, and it is further believed that they will effect a considerable financial saving on the working expenses.

THE NURSES' HOME.

This is a building of oblong shape and of four stories in height. The entrance is on the centre of the west

NORTH EASTERN HOSPITAL FOR CHILDREN · HACKNEY R.O.E. NEW NURSES HOME

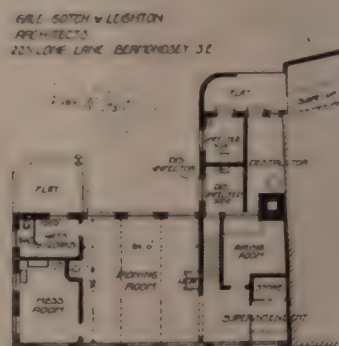


with a boot-room and store. The south-west corner of the block projects several feet beyond the line of the rest of the building, and thus provides room for the reading-room and the music-room, each of these being twenty-five feet long and fifteen feet wide, and each has a large bay window as well as other windows. There is no dining-room in the new home, as all the nurses take their meals in the hospital. The north-west and north-east angles of the block are run out into bays, one of which contains the closets (properly cut off from the block), and the other the nurses' duty-room. Close by are the bathroom and the lift, and between the bays is the fire-escape staircase. The first, second, and third floors are similar to the ground floor, but the boot-room is not carried up, and the space over the music-room and reading-room is divided into four bedrooms and a box-room. There is on the first floor a hair-shampooing room and hair-drying rooms. The nurses' bedrooms are each twelve feet long, eight feet wide, and nine feet high; and the sisters' rooms are considerably larger. A special feature of this nurses' home, and a very admirable one, is that the roof is utilised as a recreation place for the staff, and this feature has been still further improved by carrying up the north-west and north-east angles to form shelters, which face the south and have glazed doors and screens. The corridors and sanitary annexes have terrazzo floors. The bedroom floors are laid down in cement, and then covered with thick linoleum. The building is therefore practically fireproof; and, considering its good means of cross-ventilation, it ought to be an eminently sanitary one. Some of the rooms are warmed by open fireplaces, and others by steam-radiators. The hot-water supply throughout is obtained by means of Royle's "Row" type of calorifier. The home will accommodate sixty nurses, and all the arrangements for comfort and safety seem good.

THE NEW LAUNDRY.

The laundry adjoins the hospital, and communicates therewith. It is designed to deal with the washing for

NORTH EASTERN HOSPITAL FOR CHILDREN · HACKNEY R.O.E. NEW LAUNDRY.



front; and the vestibule communicates immediately with a corridor five feet wide, which runs through the home from north to south, and on either side of this corridor are bedrooms. Opposite the vestibule is the main staircase,

about two hundred patients and staff. It is a two-storied building. The ground floor contains receiving-room and distribution-rooms and the general washhouse, which latter is twenty-nine feet long and twenty-six feet wide. There is a

drying-room and foul-linen washer. From the general wash-house a staircase leads to the first floor, which contains the ironing-room, airing-room, office, store-room, mess-room, and cloak-room. The laundry buildings are conveniently placed, and will add materially to the efficient working of the hospital. The limited area of site available for this block is, to a certain extent, responsible for the internal arrangements; but there are certain points which we consider might have been improved without altering the general outline of the building. The plan shows that the receiving-room for soiled linen can only be reached by passing through the despatch-room for clean linen. After the clothes have been dried in the drying-chamber they require to be carried back through the wash-house to the lift, which takes them up to the ironing-room. After being ironed and finished, the goods must return by the same lift into the wash-house or be carried downstairs before they reach the despatch-room. The mess-room for laundry workers should have an independent entrance, and not enter directly off the ironing-room; this point has been observed in the best types of hospital laundries, and is of the utmost importance. Ironing-rooms, more especially where gas irons are in use, require to be carefully ventilated, and should never be connected

with a mess-room if this cannot be avoided, a cut-off passage with a free current of fresh air should be provided. It is not yet too late to make such a re-arrangement of the various apartments so as to obviate some of the objections to what is otherwise a very valuable addition to the hospital. The boiler-house projects towards the west side of the nurses' home, but is at sufficient distance from it, and is, of course, on a lower level than the ground floor of the block. Over the boiler-house are placed the disinfecting chambers, and there is also a "Horsfall" destructor, the flue of which runs direct into the main chimney shaft. Under the engine-house is a rain-water tank, which holds 6,000 gallons, the water being filtered before it enters the tank. In addition to this there is a Brum-Lowener patent automatic water-softener. The architects were Messrs. Gale, Gotch, and Leighton, of Bermondsey; the contractors were Messrs. Greenwood; the steel construction and staircases were carried out by Messrs. Walker, of Westminster; the sanitary fittings were by Messrs. Dent and Hellyer; the laundry machinery by Messrs. D. and J. Tullis, of London and Glasgow; the electric lifts by Messrs. Richmond and Co.; the electric lighting by Messrs. Strode and Co.; the terrazzo floors by Messrs. Diespeker. The cost of the work is not stated.

HOSPITAL MEETINGS.

ROYAL FREE HOSPITAL. RETIREMENT OF MR. BURT.

THE Right Hon. the Earl of Sandwich presided at the Annual Court of Governors of this hospital held in the hospital lecture-room on Monday last. The 78th report of the hospital was read and adopted. The report showed that the total income for 1906 had been £17,201 3s. 6d., and the total expenditure of £15,864 10s. 6d., an increase over that of 1905 accounted for by the largely increased number of patients treated. During the year the hospital treated 47,039 cases, of whom 2,474 were in-patients, while the number of attendances in the out-patients and casualty department totalled 110,353. The maternity department, which in its first year (1903) treated 132 cases, has fully justified its establishment, 417 cases having been treated during the year, but it has very materially increased the expenses. Various structural improvements—already detailed in our columns—have been made during the past year, but further accommodation is necessary. The Ladies' Association has done good work during the year and has decided to maintain a bed in Boys' ward. The chairman and other speakers emphasised the necessity for further improvements in the out-patients' department and for completing the work of structural improvements which had been commenced. The great need of the hospital was increased permanent support. Mr. Blackman, in moving the adoption of the report, quoted from the article we published last week on the hospital, and stated that close inquiry had been made into the circumstances of the in-patients; out of 334 cases so investigated, only four had been found in which there could be any doubt as to their suitability for admission. Mrs. Scharlieb strongly urged upon the Committee the desirability of providing new operating theatres.

A TRIBUTE TO MR. CHARLES BURT.

It was moved by the Chairman, seconded by Sir Edwin Durning Lawrence, Bart., and unanimously resolved:—

"That the Governors desire to place upon record their high appreciation of the very valuable services which Mr. Charles Burt has for many years past so freely rendered to the hospital and the regret with which they have received his resignation of the office of treasurer. Mr. Burt joined the Committee of Management in the year 1889, and for ten

years from 1895 to 1905 discharged the onerous duties of Chairman of the Weekly Board, and since 1901 he has held the office of treasurer.

"During the eighteen years that he has thus been associated with the management of the hospital he has at all times manifested the deepest interest in all that concerned its welfare. The many structural and other improvements which have been carried out during that period have been very largely due to his initiative and energy. Mr. Burt had also been a generous contributor to the hospital and on all occasions when it has been necessary to make special efforts to raise funds he has by his influence and energy rendered most valuable service to the Institution. The Governors rejoice to know that Mr. Burt will still retain his seat on the Committee of Management and Weekly Board, and while most heartily thanking him for all his past services they express the hope that he will long be spared to continue his beneficent labours on behalf of the Royal Free Hospital."

The Committee of Management was re-elected, Mr. Gamlen being appointed Treasurer. Votes of thanks to the Ladies' Association, to the Staff, and to the Chairman concluded the proceedings.

CITY OF LONDON LYING-IN HOSPITAL.

THE annual meeting took place on Wednesday, February 20, Mr. G. Berry in the chair. During the year the number of patients amounted to 3,425, exceeding that of any previous year in the history of the hospital; of these 639 were in-patients and 2,786 were delivered at their own houses. It was now the fourth year of the occupation of the temporary premises in Old Street, and in spite of the adverse conditions under which the work was carried on there had only been two maternal deaths, one being a case of embolism and the other of uraemic convulsions. Forty-two midwives and 113 monthly nurses had been trained during the year. The committee reported that Her Royal Highness the Princess of Wales had become Patroness of the hospital, and that the hospital had received a grant of £1,000 from King Edward's Hospital Fund, £220 from the Metropolitan Hospital Sunday Fund, and £35 10s. from the Hospital Saturday Fund. But they had already paid £30,048 on account of the new buildings, and

had been obliged therefore to borrow from their bankers the sum of £24,500. They had lately received a deputation from a large London hospital asking them to receive medical students at the hospital, and the matter would have their full attention. Votes of thanks to the medical and nursing staff concluded the meeting.

QUEEN CHARLOTTE'S.

THE annual meeting was held on Monday last, Sir Samuel Scott, Bart., M.P., presiding. The report stated that 1,704 patients had been received into the hospital during the past year and 1,886 had been attended and nursed in their own homes. To the Convalescent Home 138 patients had been admitted. The ordinary expenditure had amounted to £6,331, while the ordinary income was £5,365, including grants of £500 from King Edward's Hospital Fund, £468 from the Hospital Sunday Fund, and £144 from the Hospital Saturday Fund. The arrangements for the enlargement of the Nurses' Home were progressing satisfactorily, and it was hoped to commence building in the spring. Mr. and Mrs. Bischoffsheim had given a munificent donation of £2,500 towards the cost of this enlargement, but upwards of £6,000 was still required. A large number of midwives and monthly nurses had been trained during the year, and 107 had passed the examination of the Central Midwives Board. In addition 24 students and 35 qualified practitioners had attended the practice of the hospital. The committee is most anxious to carry out this work without trenching on the small amount of capital the hospital possesses, and very earnestly appeals for the amount required to accomplish this object.

THE LONDON HOMŒOPATHIC HOSPITAL.

THE fifty-seventh annual meeting was held on Tuesday at the Hospital, the Right Hon. the Earl Cawdor, Treasurer of the hospital, presiding. The report stated that during the past year the work of the hospital had been carried on successfully. There had been an increase in both in-patients and out-patients, 1,183 in-patients having been treated and 25,626 out-patients, a record number of both since the hospital started in 1849. The financial year closed with a deficit of £402 on the year's working, as compared with £425 a year ago. The receipts include £1,000 from "An Opponent of Vivisection." The great effort made in 1904-5 had succeeded in getting the hospital out of debt to its capital funds by paying back the loan of £12,000. The income shows a steady increase. Strenuous efforts are to be made during the present year to raise the sum of £16,275 to complete the £30,000 required to extend the hospital building on its own freehold ground. The reasons for extension are: more ordinary ward accommodation is required; a children's observation ward is required to enable children suspected of infectious disease to be isolated for observation before admittance to the general ward; more out-patient accommodation is required. The Board contemplates wards for middle-class contributing patients, which are very much needed; also more domestic accommodation is urgently required. Sir Henry Tyler promises £10,000, and Lord Dysart £2,000 on condition that the £16,000 still required is promised or paid by December 31 next. The usual votes of thanks were passed to the officers and the medical staff.

SOCIAL AND POOR LAW PROBLEMS.

AN EXPERIMENT IN MILK SUPPLY.

YORKSHIRE is taking hold of the problem of supplying pure milk, and the result of the first year's working of the Wensleydale Pure Milk Society is such as to show what can be done by an Association which, while it does not despise reasonable profit-making, has as its first aim the improving of the food supply of the neighbourhood in an important particular. The Society's motto might be taken from a dictum of one of the directors, Mr. Philip Burtt, who defined their aim as being "philanthropy on a commercial basis."

Commercially, the Society has as yet to admit a loss, but this is a not infrequent feature of the first year's working of any company, and, as the Wensleydale Society commenced operations only in October 1905, it has only one year's complete working to show, and, though that has to confess to a loss of £773 12s. 9d., the prospects of the company are good, and the succeeding quarter shows a satisfactory profit. A bottling factory is established at Northallerton, where, by June 30 of last year, the amount bottled daily was 250 gallons. Distributing centres have been established at Scarborough and at Leeds, where the setting up of a second centre is in contemplation. Besides these special depots belonging to the society, the milk bottled by it is being sold at Newcastle-on-Tyne, West Hartlepool, Middlesbrough, Wallsend, South Shields, Hebburn, Jarrow, and Murton Colliery. The Society expresses special appreciation of the help given by "the active enterprise of the Newcastle-on-Tyne Co-operative Society." As the co-operative societies have their shareholders for the most part among the working class, this acknowledgment shows that the distribution of pure milk is going on actively among that part of the population who most need protection in this important matter.

But good distribution is of little value without good production. If the farms whence the milk is procured are bad it avails little that the shops where it is sold are good, though perhaps it may save expense in sterilisation. But pure milk, which needs no treatment, is better far than milk in which benign germs are destroyed in the process of getting rid of dangerous ones. Therefore, we think that one of the most important parts of the Wensleydale Society's work is the improvement of conditions in the farms where the milk is produced. The report states that upon eight farms new dairies have been built, and upon eleven farms an alteration of buildings has been made in order to comply with the Society's regulations as to filtering and cooling the milk. Thirteen new milk-cooling plants, and twenty-four special milk filters have been erected. Three new cow-houses have been built by the landlords at the instigation of the Society, and many others improved as regards floors, drainage, ventilation, and light.

This, though it does not show in the balance-sheet, is really one of the most important departments of the Society's work. When farmers realise that having their cowsheds and dairies in a sanitary condition secures them a sale for their milk, they will be ready to fall in with the suggestions of the Society on these matters. Of course, the conversion of producers depends largely on the conversion of consumers. If the Society could show next year a table of the infant mortality among families using their milk as compared with that of an equal number of families who are not so fastidious, they would do a great deal towards proving the importance of cleanliness in milk supply, and this would help to make the Society as satisfactory as a commercial as it already is as a philanthropic undertaking.

THE "Rapco" London view picture postcards, issued by the Regal Art Publishing Company, 9 Long Lane, are artistic and really excellently printed reproductions of well-known City views. The cards are entirely of British manufacture, and will appeal to collectors by their beauty of design and harmony of colour.

NEWS AND COMING EVENTS.

ARRANGEMENTS are being made for a bazaar to be held in June in aid of the funds of the East London Hospital for Children.

THE Ladies' Association of the Shadwell Hospital for Children has decided to endow a Ladies' Association in that institution.

THE annual general meeting of the Governors of the Royal Dental Hospital will be held at the hospital on Thursday, March 14, at 5.30 P.M., William H. Ash, Esq., J.P., in the chair.

THE festival dinner in aid of the National Hospital for the Paralysed and Epileptic will take place on Monday, March 11, in the Whitehall Rooms of the Hôtel Métropole. Sir Edgar Speyer, Bart., will be in the chair.

THE annual meeting of the Royal National Orthopædic Hospital was held on February 27, at which the report of the committee was adopted and the usual routine business was transacted.

SIR LENNOX NAPIER has felt himself obliged to relinquish the chairmanship of the Committee of Management of the West End Hospital for Diseases of the Nervous System, Paralysis, and Epilepsy, but will retain his seat on the Board.

At a recent meeting the Henstead District Council considered the desirability of providing an isolation hospital for the district at Swainsthorpe. It was pointed out that during the last half-year more than £60 had been spent by the Council in dealing with outbreaks of scarlet fever, and that the upkeep of a small isolation hospital would not be very great. Definite action in the matter was finally postponed.

At the annual meeting of the London Fever Hospital the Secretary stated that the increase in the number of patients treated in the hospital was not due to an epidemic, but to a fact which had brought the hospital conspicuously to notice. At the end of 1895 there was a movement in favour of admitting paying patients to the hospitals of the Metropolitan Asylums Board. Thereupon the Secretary of the London Fever Hospital sent a circular to doctors generally pointing out that this institution did such work on reasonable terms, and subsequently the Metropolitan Asylums Board resolved to take no further action in the proposed direction.

THE Bradford Eye and Ear Hospital had its origin in a small private dispensary, established by the late Dr. Bronner for the purpose of giving gratuitous advice and treatment to the poor who were suffering from diseases of the eye and ear. The work was at first carried on in two rooms in Rawson Place, adjoining the old green market, and it was watched with so much interest that the private charity was soon converted into a public institution. At this point a house was rented in Brunswick Place, the work being carried on there from 1857 to 1865. The first stone of the present building in Hallfield Road was laid in 1864 by the late Sir Titus Salt, and in the following year the opening ceremony was performed by the late Mr. Charles Semon, then Mayor of Bradford. In the first year there were 610 patients, while last year the number had increased to 7,270, upon whom 24,547 attendances were made.

LORD ARMSTRONG has been elected Chairman of the House Committee of the Royal Victoria Infirmary.

A NEW workhouse infirmary has been opened at Wetherby. It gives accommodation for 22 patients and has been constructed at a total cost of less than £2,000.

PREPARATIONS are being made for an International Medical Congress to be held at Budapest in 1909. The Congress will be divided into twenty sections, and papers may be read in German, English, or French. Many well-known specialists have promised to attend.

THE need for a hospital at Ilford has greatly increased since that town became so large a centre of population. For a long time it was felt that it was not proper that in cases of accident and emergency the unfortunate sufferers should have to be taken by road or rail to either the West Ham or the London Hospital. It is probable that the building of Ilford Hospital will soon have been begun. Mr. Holcombe Ingleby gave £1,000 to the fund at a hospital dinner, and a bazaar in aid of the hospital was furnished by nearly all the public organisations in Ilford.

EDITOR'S LETTER-BOX.

[Our Correspondents are reminded that prolixity is a great bar to publication, and that brevity of style and conciseness of statement greatly facilitate early insertion.]

CONVALESCENT HOMES ASSOCIATION.

To the Editor of THE HOSPITAL.

SIR,—About two years ago a public appeal was made representing the great need of further accommodation for convalescents recovering from surgical operations and from special medical ailments. The Convalescent Homes Association discouraged any outlay on bricks and mortar, and made efforts to induce certain convalescent homes to adapt themselves to the admitted needs of hospital, which have been abundantly successful, and have resulted in the opening of some forty-one new surgical beds at existing homes.

These beds can only be obtained at a cost of from 10s. to 7s. 6d. per week for adults and of 6s. per week for children.

Information regarding available beds and all other convalescent matters can be supplied at the new Inquiry Bureau opened by the Convalescent Homes Association at 32 Sackville Street, Piccadilly, W. A small fee is charged. It is hoped that the public will avail themselves of this new and useful means of gaining information as to the provision made for convalescents who are not usually taken in by convalescent homes.

It seems probable that this new provision of surgical beds is not fully known, and the special attention of sisters of wards is directed to the novel effort of the Convalescent Homes Association; for, in spite of the urgent cry for such beds, now that they have been provided they are not filled. We have little doubt that the need exists, but there is no question that the demand is not so acute as has been represented in some quarters.

One fact has been elicited by the work of the Convalescent Homes Association—namely, that there is a pressing want of beds for children suffering from chronic suppuration and surgical wounds—cases which block the wards of our hospitals and which are at present very inadequately provided for.

The Convalescent Homes Association has recently made an attempt to obtain from the Parks Committee of the London County Council one or more of their mansions in public parks for this purpose, but without success. The appeal of the Lord Mayor does not quite touch the case of chronic surgical ailments in children: It is rather made for an equally needy class—those children who are crippled and deformed as the results of past disease. Admirable as the effort is, and thoroughly as it deserves success, it does not touch the class of children who are suffering from chronic diseases, convalescent, though not yet healed. The Convalescent Homes Association have made, and are still making, an attempt to relieve these. We are, sir,

Your faithfully,

W. S. CHURSK (Chairman).
M. O. FITZGERALD } (Hon. Secs.).
S. H. HABERSON }

THE LIABILITY OF HOSPITAL COMMITTEES UNDER THE WORKMEN'S COMPENSATION ACT, 1906.

To the Editor of THE HOSPITAL.

SIR,—As, doubtless, has been the case with the governing bodies of all hospitals throughout the Kingdom, the Managing Committee of this Institution has had under consideration the question above referred to, and they would be glad to know whether the responsible authorities of the large Metropolitan or Provincial hospitals intend taking concerted action in this connection.

Apart from the question of liability to domestic servants under the new Act, the existence of which there would seem to be but little doubt, the far weightier question arises as to a hospital committee's responsibility, under that Act, in regard to salaried servants, such as the resident medical officers, the nursing staff, whether employed in the hospital or in nursing cases outside, the dispensers and their assistants, and the office staff.

May I ask you, Sir, kindly to find space in your valued columns for this letter, and to invite the opinion of experts in such matters on the important subject to which it relates.

I am, dear Sir, yours faithfully,

CHAS. W. DICKINSON, Secretary.

Royal Albert Hospital, Devonport, February 25, 1907.

THE LATE DR. SCHORSTEIN AND MEDICAL EDUCATION.

SIR,—We shall be grateful if you will spare us space to advocate simultaneously the claims of medical education at the London Hospital Medical College and a memorial to one of the most prominent physicians at that college.

The colleagues and friends of the late Dr. Schorstein are anxious to perpetuate his memory by the endowment of an advanced course of lectures in clinical medicine, which it has long been recognised is one of the greatest needs of the medical school. It is not intended to create by this a course to form part of the ordinary school curriculum, but rather something on the lines of the endowed lectureships at the Royal College of Physicians, such as the Gouldstonian.

It is proposed that a course or courses of three or four lectures be given by a physician to be elected by the governing body of the school. The number of lectures and the remuneration will be determined by the amount of the money raised; but we wish to make clear (1) that the election to the lectureship will be regarded as a professional distinction; (2) that due notice will be given, so as to afford the lecturer ample time to prepare a discourse worthy of the subject and of the man in whose memory it is given.

Subscriptions, large or small, may be sent to the Hon. Secretaries of the Fund: Dr. Cholmeley, 11 Portland Place, W.; Dr. Cecil Wall, 6 Cavendish Place, W., or to the Manager, Barclay's Bank, 27 Cavendish Square, W. They will be acknowledged on a numbered receipt form; but no list of either donors or amounts will be published, as this, it is felt, would have been in accordance with Dr. Schorstein's wish.

Dr. Cecil Wall will be pleased to supply further details of the scheme on application. We remain, yours truly,

Samuel Montagu, Lewis McIver, C. H. Dorking,
Stephen Mackenzie, William Osler, Percy Kidd.

London Hospital Medical College, Whitechapel, E.

THE UNIFORM SYSTEM OF ACCOUNTS.

NEW ANALYSIS LEDGER.

In accordance with the requirements of the King's Fund the modifications of this system of accounts, involving new books, will have come into force on January 1 last. It is very desirable to minimise the cost to the hospitals as much as possible. With this object in view, the Scientific Press (28 and 29 Southampton Street, W.C.) have prepared a new Analysis Ledger, ruled in accordance with, and adapted to the requirements of, the new index and classification recently adopted by King Edward's Hospital Fund, and the Hospital Saturday and Hospital Sunday Funds. The ledger is bound in half basil, is printed and ruled on good paper, so as to make it in every way a serviceable book for hospital use. The price—32s. 6d.—is very moderate owing to the printing of the large number of copies, and should ensure a substantial sale.

THE BEST NATURAL APERIENT WATER.

Hunyadi János

For LIVER COMPLAINTS, OBESITY, &c.

The "VIENNA MEDICAL PRESS" says:—

"Hunyadi János may be regarded as a specific for obesity."

AVERAGE DOSE.—A wineglassful before breakfast, either pure or diluted with a similar quantity of hot or cold water.

CAUTION.—Note the name "Hunyadi János," the signature of the Proprietor, ANDREAS SAXLEHNER, and the Medallion, on the Red Centre Part of the Label.

The Hospital.

Nursing Section.

Contributions for "THE HOSPITAL," should be addressed to the EDITOR, "THE HOSPITAL"
NURSING SECTION, 28 & 29 Southampton Street, Strand, London, W.C.

NO. 1,060.—VOL. XLI.

SATURDAY, JANUARY 5, 1907.

Notes on News from the Nursing World.

THE KING AND DISTRICT NURSING.

THE interest which the King takes in the progress of district nursing is manifested in a practical manner by the gift which his Majesty has just made of £20 from the Windsor Castle State Apartments Fund to the Slough Nursing Fund. In addition to its intrinsic value the donation may be regarded as the personal testimony of the Sovereign to the excellent work done by the trained nurses employed by the Fund to attend the poor, who form a very numerous proportion of the inhabitants of Slough.

ROYAL NATIONAL PENSION FUND FOR NURSES.

THE year just closed has been one of unprecedented success for the Pension Fund. In spite of the fact that the work of 1905 showed a huge advance on any previous year, 1906 surpassed all its predecessors. A most notable point is that during the last three months more nurses entered the Fund than in any quarter since its establishment. During the twelve months the sum of £114,000 was received in premiums, and the total income exceeded £155,000. The invested funds have now reached a total considerably over a million sterling. There was a great increase in the amount paid out in annuities, which are now being distributed at the rate of over £16,000 per annum, or £3,000 a year more than in 1905.

AN INCIDENT IN A POOR-LAW INFIRMARY.

THERE was an inquest at Hackney on Friday on the body of a woman who died at Hackney Union Infirmary on Boxing Day, and it was stated that she fell out of bed during the night of December 20 while the nurse was out of the ward. Nurse Leys, who gave evidence, said that she had charge of a ward containing thirty patients, and was on duty from 7.30 P.M. to 8 A.M., and that she had one day off a fortnight. As a matter of fact she is also off duty from 8.30 till 10.30 A.M. each day, on Sunday till 10 P.M., and once each five weeks from 8.30 A.M. till 1 P.M. next day, when she can spend the night at her home or with her friends. Moreover, we are informed that if there are acute patients in the wards an extra nurse is always put on to assist. The accident occurred at 5.45 A.M., when Nurse Leys was preparing the patients' breakfast in the kitchen close to the ward. Night nurses are obliged to leave the ward for this purpose, and also to prepare dressings. Miss Leys has been on the staff since November 11, 1904, and is 27 years of age; though we are pleased to notice that the juryman who asked the nurse how old she was was promptly censured by the coroner, who remarked that it was

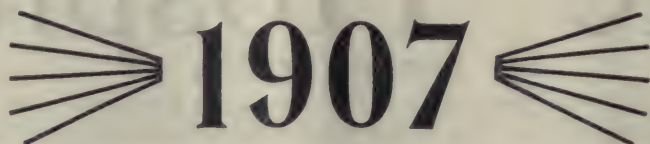
no business of his, the nurse being evidently an able-bodied person. The jury added to their verdict of "accidental death" a rider "that no nurse should be kept on duty all night in a ward with thirty beds without assistance, or that the hours should be shortened." The hours are certainly long, and as it is impossible to prepare breakfast for thirty patients and to get their dressings ready without spending considerable time out of the ward, we think that, in the indispensable absence of the charge nurse, there should be a probationer available. As we have so often urged, no ward containing a number of sick persons should be left without a nurse.

POOR-LAW PROBATIONERS AND MIDWIFERY.

A VERY interesting point is under the consideration of the Staff Committee of the Hull Guardians. It has been proposed, at the instance of the medical officer, that the sum of £10 shall be spent in instructing five probationers in midwifery, so as to pass the qualifying examination. Objection has, however, been taken on the ground that four of the five probationers are leaving shortly, and it is urged that in these circumstances they ought not to sanction the expenditure of the ratepayers' money. The Guardians who favour the proposal rejoin that the probationers in question have been capital workers, and that if they are sent out in every respect qualified, the best class of candidates will be attracted when vacancies on the staff are announced. We hope, in their own interest, that the Guardians will decide to adopt the recommendation. If it be essential to avoid the waste of the ratepayers' money, it is also advisable to offer every reasonable inducement to young women to enter the Poor-law nursing service; and instruction in midwifery at the cost of £2 a head may fairly be included in this category.

THE REGIMENT AND THE GENERAL ARMY.

AT the annual meeting of the Cheltenham District Nursing Association the Chairman of the Executive Committee formally announced that it was affiliated to the Queen's Jubilee Institute. As he anticipated that people would ask why an organisation nine years older than the Institute itself should have considered it necessary to take that course, he said that a time came when it was recognised that the regiment must be enrolled in the general army. It was a bad thing to be isolated, he continued, and the work of the Queen's nurses extended over the whole country, and was conducted on rules practically identical with those which the Cheltenham Associa-



1907

NOW READYNOW READY

“THE HOSPITAL” CALENDAR AND NOTEBOOK

This compact and useful little Notebook, which is of a convenient size for the pocket, is in appearance an exact reproduction of THE HOSPITAL Journal in miniature and contains much information of value to Nurses, including:

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With diagram to show points where pressure can be applied most effectively in Hæmorrhage.

MEASURES: APOTHECARIES' AND OTHER WEIGHTS.

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TO NURSES

THE HOSPITAL Calendar and Notebook will be forwarded **Post Free** on receipt of **Two Penny Stamps**. Nurses requiring additional Copies can obtain One Dozen, post free, for Nine Penny Stamps.

N.B.—It is advisable to make immediate application to avoid disappointment, as the edition is limited and no reprints will be issued when it is exhausted.

Address—

THE MANAGER, Calendar Dept., THE HOSPITAL,
28 & 29 Southampton Street, Strand, London, W.C.

tion had invented. He affirmed that a great stimulus was afforded by connection with a large body like that represented by the Jubilee Institute, and he was confident that on every ground advantage would accrue. He especially emphasised the benefit of periodical and independent inspection of the nursing staff. Subsequently, Miss Amy Hughes delivered an address, in which she expressed the pleasure it had given her to revisit a town which was one of the pioneers in the great work of district nursing; and other speakers intimated their satisfaction that the affiliation had been arranged.

A PROBATIONER LOSES HER SIGHT.

A DEPLORABLE event, illustrating the risks which nurses run in the discharge of their duty, took place the other day at West Ham Poor-law Infirmary. A patient suffering from typhoid fever spat in the eye of a probationer in attendance. Two specialists were called in at once, but the sight of one eye has been destroyed and that of the other impaired. The guardians have assured the probationer that, "so long as she behaves herself," she will be employed by them; and that, we suppose, is the only consolation they are able to offer the unfortunate girl, for whom everybody will, we are sure, feel the utmost sympathy.

A BROKEN AGREEMENT.

THE Chelmsford Guardians recently appointed as charge nurse at the Poor-law Infirmary a nurse from Sheffield. She appeared before the Board in person, was unanimously elected, received her expenses, and agreed to commence her duties after Christmas. Four days later she sent a telegram saying that, "owing to unforeseen circumstances," she was unable to take up the appointment. We think that the Guardians, who are very indignant at the way in which she has behaved, have cause for complaint. They have been put to needless expense, and have rejected applicants not less suitable who, it appears, are now engaged elsewhere. A nurse should never accept an appointment unless she has fully made up her mind to carry out her agreement. We presume that the nurse who broke her agreement has since returned her expenses.

FATAL FALL FROM A TRAM-CAR.

NURSES in all countries so freely use tram-cars that the sad case of a New Zealand nurse merits attention. This nurse, who was attached to a Nurses' Institute in Auckland, was hurrying to attend an urgent case, and in her haste got out of the tram-car while it was in motion. Such, at least, was the conclusion formed at the inquest, though it was admitted to be possible that her fall might have been caused by the jolting of the car while she waited on the step. The result, anyhow, was that her head struck the road with great force, the base of the skull being terribly fractured. Unfortunately it was necessary to have the funeral before any of the relatives of the deceased could arrange to be present, but many nurses followed her remains to the grave, and numerous wreaths were sent. It is very important that a nurse should lose no time in proceeding to a case, especially if it be described as

urgent; but her first obligation is to take care of herself and see that she does not meet with an accident on the way. No one should ever leave a tram-car until it has come to a standstill.

A HAPPY SITUATION AT SUNDERLAND.

THE nurses attached to the Sunderland District Nursing Association are to be congratulated upon the important extensions which have been made to the home. Lady Londonderry, who performed the task of declaring the premises open, affirmed that the subscription list and the number of cases nursed, which was nearly 1,200, indicates that the work of the Association is thoroughly appreciated and understood in Sunderland. There is generally no difficulty in attending an adequate number of cases, but when, in addition to this, the list of subscribers is all that could be desired, the advantages of district nursing to a community do not need to be urged; they have been clearly apprehended.

NEGLECTING TO NURSE THE CHILDREN.

THE Lincoln Guardians have decided to add to the number of the nursing staff attached to the infirmary wards. When the subject was under discussion a member of the Ladies' Nursing Committee, to whom the question had been referred, mentioned that the medical officer said it was absolutely necessary that another nurse should be appointed, and he added that "the most neglected corner was the children's ward." Such a statement as this should not have been possible. The children, if simply because of their tender years, should be the last to be neglected; and we hope, for the credit of the Lincoln Guardians, that in future their ward will receive adequate attention from the nursing staff.

COTTAGE HOSPITALS AND STAFF NURSES.

WE mentioned a fortnight ago the large number of applications received for the post of matron of a cottage hospital. In contrast to this the authorities of Redhill Cottage Hospital advertised the other day for a staff nurse, and there was not a single candidate for the post. Of course it is the desire of most nurses to become a matron, and the appointment of staff nurse in a small institution does not seem to offer much scope for ambition. But it affords plenty of opportunities for useful work, and at Redhill Cottage Hospital, which contains thirty-one beds—nineteen of these being generally occupied—the three staff nurses assist in the training of the three probationers.

AN ASSISTANT SUPERINTENDENT FOR BIRKENHEAD INFIRMARY.

THE appointment of Miss Copeland as assistant superintendent nurse and house sister at Birkenhead Union Infirmary, which we announce in another column, marks a step in advance, that was not adopted without opposition. Miss Copeland, who was trained at Birkenhead Infirmary and has been charge nurse there for three years, was chosen from a number of applicants, and she is the first occupant of the office to which she has been elected. The creation of the office was pro-

tested against by a guardian on the ground that it was contrary to the rules and regulations, but he ultimately gave way and expressed himself satisfied that the superintendent nurse needs the help which she is now to receive. We have no doubt that the nursing staff and the patients, as well as the superintendent nurse, will profit by the new arrangement.

RESIGNATION OF A MATRON.

THE post of lady superintendent of nursing and of housekeeping at the Queen's Hospital, Birmingham, has become vacant by the resignation of Miss C. Elkington. Applications for the post will be received by the Committee of Selection up to January 31. The commencing salary is £100 a year.

NURSES' AND OTHER ENTERTAINMENTS AT GUY'S HOSPITAL.

AN excellent concert was given on Friday last in the Physiological Theatre at Guy's Hospital. Mr. Seymour Hicks and Miss Ellaline Terriss took part in the performance, and charmed the audience with their talent. Sir Alfred Fripp acted as host. Many of the convalescent patients from all parts of the hospital were able to be present. This entertainment was on behalf of "Luke" and "Charity" wards. On Wednesday, Thursday, and Saturday evenings the residents gave most delightful entertainments of both music and theatricals, to which their friends, the medical, surgical, and nursing staffs, were invited. On Friday evening the nurses gave their entertainment in the Home, which was beautifully decorated for the occasion by the nurses. The staff and residents were the guests of the evening. On Tuesday, January 1, the nurses repeated their performance in the Physiological Theatre, at which a silver collection was made for the benefit of the Recreation Society Fund.

TRAINING IN VICTORIA.

A CONFERENCE of Hospital Managers and the Royal Victorian Trained Nurses' Association was held in Melbourne Town Hall on Friday, November 23. Representatives from forty-three hospitals met delegates from the Association to finally arrange various items in the training of nurses. The Queen's Memorial Hospital for Infectious Diseases naturally looks upon itself as the correct and only place capable of giving this special training, while many of the country hospitals are averse to sending their pupils to Melbourne for this certificate when they have infectious wards in their own institutions. The Association accepted the conditions laid down by the hospital managers that where the pupils can give evidence of having nursed a sufficient number of infectious cases, and have passed a special examination in town, the special certificate shall be given. This certificate is only compulsory for those who enter for the Matron's Examination, though private nurses are advised to take it up. The next question was the recognition of hospitals with less than ten daily occupied beds. The Association was very unwilling to recognise any training in such

institutions, but strong arguments were brought to bear on the financial difficulty of employing trained nurses; and eventually it was decided to allow them to take pupils for three years, with a compulsory six months at the Women's Hospital, Melbourne, and three months at the Infectious Diseases Hospital.

EVENING LECTURES TO NURSES.

A SERIES of Lectures by medical men to nurses will be commenced at the Miller Hospital, Greenwich Road, on Tuesday evening, January 8, and continued every Tuesday except March 26, April 2 and 9, until May 28. They will commence at eight o'clock, and are free to all nurses. Application for tickets should be made to the matron of the Miller Hospital.

GATHERING OF MALE NURSES.

AN interesting gathering of male nurses took place at the National Hospital, Bloomsbury, on December 21, to bid farewell to Nurse Suckling, who has completed his training at that institution. Mr. Cope, senior staff nurse, presided, and, having expressed the good wishes of the staff, said he hoped that Mr. Suckling's future would be happy and prosperous. He considered that the old prejudice against male nurses was rapidly giving way, and it was now recognised that the hospital trained and certificated male nurse was a necessity. He urged every nurse present to do his utmost for the credit of the National Hospital, and to strive to raise the standard of nursing.

THE REGISTRATION FEE IN AUSTRALIA.

At a special meeting of the Royal Victoria Trained Nurses' Association, held on Wednesday, November 21, the question was raised whether a registration fee in one sum of £2 2s. or £3 3s. would not be a more satisfactory arrangement than the 10s. 6d. per annum, which has been, and is, such a trouble to collect. The matter was deferred to the February meeting.

"THE HOSPITAL" CONVALESCENT FUND.

THE Hon. Secretary begs to acknowledge with thanks the receipt of 2s. 6d. from Nurse Barnes-Groom. Annual subscribers are reminded that their kind subscriptions for 1906 should be sent in immediately. The work of this Fund is proceeding steadily, and during 1906 most deserving cases have been helped. Nurses are most generous and kind-hearted to their fellows in distress, and all are therefore appealed to once again to contribute something, however small in amount, to THE HOSPITAL Convalescent Fund, and thus ensure that no deserving case brought to its notice shall be neglected for want of funds.

SHORT ITEMS.

THE sale recently held in aid of the Hospital for Invalid Gentlewomen, in Harley Street, realised, we are glad to hear, upwards of £150.—On Monday last an enjoyable evening was spent by the in-patients of the Cancer Hospital, Fulham Road, at an entertainment given by the Lancaster Pierrots for Mrs. Read.

The Nursing Outlook.

"From magnanimity, all fears above;
From nobler recompense, above applause,
Which owes to man's short outlook all its charm."

A NOBLE WOMAN.

THE late Baroness Burdett-Coutts at the age of twenty-three suddenly came into possession of a fortune so large as to make her the envy and wonder of her contemporaries. In 1837 millionaires were few in number, and such as there were had their wealth so hampered by claims and restrictions, that few could command large sums, even, for their own purposes. Miss Angela Georgina Burdett as a millionaire at twenty-three, with an abundance of ready money and an immense income for those days, was not unnaturally envied by many. She became the centre to which all sorts of people directed their attention for their own purposes. At this time the position of a woman of wealth, who was young and unmarried, was deemed insecure and indeed unsafe, so that public opinion expected her to select a husband, as the wisest step she could take for her own protection. It required much character and resolution to put aside all such projects, as the late Baroness did, and to resolve to be the mistress of her own fortune and its custodian. It was a great opportunity for the exercise of wisdom and example, for at this time the wise administration of charity was neither understood nor practised. Beset by suitors for her hand, overwhelmed with applications for monetary gifts for all kinds of schemes and individuals, worried by the importunate, and wooed by the designing, the position, in which Miss Angela Burdett found herself, was not only difficult but bewildering. That she should have faced it with courage and displayed marked originality and judgment in the solution of the difficulties presented, must ever make the Baroness' name memorable in English history.

Recognising that the exhibition of great ability was as essential to the wise administration of wealth as to its acquirement, the Baroness sought the best available advice, not only in the management of her business, but in the administration of her charities. Her sympathies were wide and comprehensive. She aimed, especially, at helping the poor to maintain themselves in comfort, to obtain adequate housing accommodation, to secure an abundance of wholesome food at the cheapest rates, and a supply of suitable work at adequate wages, especially in times of depression and difficulty. Her sympathies extended to the poorer citizens of London and of the United Kingdom. Her efforts were not restricted to the metropolis, for she did much to help distressed communities both in Scotland and Ireland. By her schemes of emigration she was the means of rescuing

many poor families from poverty, and placing them in a position of comfort and independence. She had great sympathy with the animal kingdom, and was untiring in her efforts to promote the kind treatment of horses and donkeys used in the streets, whilst her devotion to dogs and singing birds caused her to write many excellent letters to the Press which led to legislation, and were followed by improvements in many directions. No animal was too small nor too miserable to win her sympathy, and no scheme for the welfare of poor or down-trodden people, too large to secure her most generous support. She lent her aid to the improvement and extension of education, and was, in fact, the pioneer of technical education in this country, as the history of the Westminster Institute of Technical Training testifies. Without a family of her own, her sympathies were warmly engaged in the service of children, and it was the Baroness who inaugurated the Royal Society for the Prevention of Cruelty to Children. We have but enumerated some of the greater objects which engaged her attention, but throughout her life the Baroness maintained a number of almoners, whose duty it was to provide, adequately, for the needs of a multitude of individual cases of distress or suffering, in which she took the deepest personal interest.

Great as may have been the good accomplished by the generosity by which all her actions were supported, the Baroness Burdett-Coutts' claim to recognition in history will deservedly rest upon the results for good, which have flowed from her example. By her wisdom and spirit she proved the baselessness of the fears that disaster might befall her at the outset of her career; by her sagacity and good sense she immeasurably raised the position occupied by women in the general estimation, gave courage and enterprise to her sex, led the way for the rich to wisely utilise their wealth, during their lifetime, for the good of the community, and was in fact, as has been well said, not only the devoted and trusted friend of Queen Victoria, but her life will stand, next to that of Queen Victoria herself, in the Victorian era. Loving freedom, justice, purity and the joy of doing good, the Baroness Burdett-Coutts' example may well stimulate every woman, to quit herself worthily, and to do her utmost, always, to maintain the principles from which she derives her own strength. She was deservedly and widely popular and beloved. Throughout her career she avoided publicity, and so little is actually known of her many good works, that the obituary notices, which have appeared, reveal a paucity of information, which is the most striking testimony to her worth and methods, that could be forthcoming. The Baroness was a noble woman, for to her initiative and strength of character women owe much, which they have probably failed, as yet, to appreciate at its true value.

The Care and Nursing of the Insane.

By PERCY J. BAILY, M.B., C.M. Edin., Medical Superintendent of Hanwell Asylum.

II.—NURSING THE SICK.

(Continued from page 176.)

Treatment of Bed-sores.

In dealing with patients in whom bed-sores are likely to occur the nurse must be constantly on her guard to avoid all the preventable causes of these injuries. We shall therefore consider their treatment under two distinct headings: (1) How to prevent their occurrence; (2) how to hasten their healing after they have developed.

(1) *The Prevention of Bed-sores.*—(a) All parts of the patient which are subjected to pressure as he lies in bed, especially the buttocks and the region of the sacrum, and any portion of the skin which shows a tendency to redness must be kept scrupulously clean and dry. Great care should be shown in removing every trace of soap after washing, by the use of two basins and two flannels as already explained. The parts must be very thoroughly dried, but should not be rubbed with rough or hard towels, the drying being effected rather by dabbing movements than by rubbing. When the skin is obviously very tender lint or cotton wadding should be used rather than ordinary towelling. When as much moisture as possible has been removed by this means the part should be dabbed with a pledget of cotton-wool soaked in spirit, or the spirit may be rubbed over the part with the palm of the hand. The spirit abstracts the moisture that is left and afterwards rapidly evaporates leaving the skin perfectly dry. The part must then be well dusted with some dusting powder.

(b) The position of the patient as he lies in bed should be frequently changed. It is not necessary that the change in position should be very great, all that is required is just sufficient movement to ensure an alteration in the part which has been receiving the greatest amount of pressure.

(c) The under-sheet and the draw-sheet must be kept perfectly smooth and free from all rucks, and the accumulation of crumbs in the bed must be prevented.

(d) In the use of bed-pans all risk of bruising or scratching the skin must be avoided by carefully lifting the patient when the pan is placed under him and again when it is removed and the instructions for the after treatment of the parts already given should be followed.

(e) As soon as any portion of the skin becomes red and shows a tendency to bed-sore the patient should be immediately placed upon a water-bed. This is the only means whereby the pressure may be properly diffused over the whole surface of the patient's body which comes into contact with his support. If the old-fashioned but excellent form of tank water-bed be employed the use of any sort of mattress may be done away with. In such cases the tank should be nearly filled with water, otherwise there is a risk of the patient's body coming into contact with the bottom which would not only entirely do away with the object of the water-bed,

but would put the patient in a position ten times worse than it was before his removal. The place of the mattress should be taken by several layers of blanket, and if the habits are faulty a mackintosh sheet should be placed between them. Besides the use of water-beds much may also be done to relieve pressure by water and air cushions, and padding by means of cotton-wool.

(f) The redness which always precedes and is a warning of the approaching bed-sore is due to the fact that the circulation of the part becomes stagnant and the veins congested. This may to some extent be overcome by gentle friction with the palm of the hand which stimulates the circulation. The hand should be lubricated with some kind of antiseptic ointment. The ointment has no direct influence in warding off the bed-sore, but the mere fact of its making the cuticle greasy increases the resistive powers of this layer of the skin against moisture and thereby acts beneficially when the patient suffers from incontinence of urine and is more or less continuously wet. For this reason the basis of the ointment should not be lanolin. This friction should be applied after the part has been washed and thoroughly dried with spirit and before the application of the dusting-powder.

(g) It has been recommended that where a bed-sore is threatening the skin should be hardened by a dilute solution (1 per cent.) of formal. Personally, I have no experience of this method, but I cannot help fearing that any hardening of the living tissues by this reagent must be obtained at the expense of its vitality and therefore do not favour its use. The application of spirit, as already suggested, has to a less degree some hardening effect upon the skin, but its use is not recommended on this account.

(h) The patient's body and bed-linen must be kept absolutely clean. Patients whose habits are faulty should be changed immediately they are found to be wet or dirty, and in dealing with such cases the nurse must be constantly on the watch by day as well as by night so as not to leave her patient in this condition. It frequently happens that the sheets and body-linen may become moistened by the profuse perspiration of the patient. When this is so it is equally necessary to change the patient at once. The use of a mackintosh sheet always interferes with the proper ventilation of the bed and so prevents the evaporation of the sweat which, accumulating around the patient, irritates and softens the skin and thus favours the formation of bed-sores. Hence the use of a mackintosh is to be avoided except where it is absolutely necessary.

(2) *Curative Treatment of Bed-sores.*—(a) When there is no slough and little or no discharge the part should be kept clean by frequent washing with some mild antiseptic lotion such as boracic lotion or a dilute (1 to 50 or 100) carbolic lotion and afterwards carefully dried and sprinkled with iodoform and dressed with dry iodoform gauze. If the discharge is more abundant the dressing must be moist and should consist of iodoform or cyanide gauze wetted with boracic lotion.

(b) When the formation of a slough cannot be prevented every means should be adopted to hasten its removal. The sore should then be dressed with moist boracic dressings which require to be very frequently changed. As the slough invariably becomes septic the smell is often most foul and penetrating. In such cases a charcoal poultice is most useful since it not only greatly lessens the foul odour,

but also hastens the removal of the slough. When the slough has separated the sore is to be treated as an ordinary healing wound; moist antiseptic dressing should be applied, and these require to be frequently changed since the discharge is often most profuse. When the wound is very deep, or if it should have overhanging edges, it should be packed with iodoform or cyanide gauze.

The Nurses' Clinic.

FEMALE CATHETER CASES.

EVERY nurse must learn during her period of training how to pass the catheter on a female patient. She must also know from the doctor the times when a catheter ought to be passed, and the times when it ought not to be passed, the different kind of catheters used, and why. Unless under very special circumstances the doctor in charge leaves this part of the treatment entirely to the discretion of the nurse. Nurses in hospital will usually notice that they have more catheters to pass in the gynaecological wards than in any other.

It is necessary to pass the catheter in the following cases:—Immediately before all abdominal operations having to do with the uterine organs, immediately before all operations having to do with the bladder or ureters, in cases of retention of urine from whatever cause, and when specially ordered by the doctor, which may happen in the after nursing of particular abdominal or urinary fistula cases. In the latter cases the nurse is often ordered to catheterise the patient four hourly, or sometimes a catheter is fixed into the bladder at the operation, and the nurse must remove it to clean, at stated times; and again refix in position. In all ordinary cases unless a special order has been given the patient must be encouraged in every way to pass urine herself. Patients who have had hysterectomy, ovariectomy, perinaorrhaphy, or other uterine operations, often have some difficulty in passing urine for a few days after operation. This difficulty may arise either through paralysis of the sphincter muscle; for the time being, or a nervous hysterical state of the patient. In all cases of this kind the patient ought to be coaxed and encouraged in every way to pass urine herself, and failing this hot fomentations must be tried, applied over the pubes, or in abdominal cases over the vulva, before resorting to the catheter, as, if the catheter has once been passed it is often the beginning of many passings, as the patient begins to look on it as the only means of emptying the bladder whilst she is lying. I have heard a patient say, "Oh, you know I don't pass it myself, I need to have it taken from me!" so that it is always best in these cases for a nurse to use all her powers of persuasion before letting a patient get into that state. When necessary, unless specially ordered, the catheter should not be passed oftener than eight-hourly.

The most common sort of catheters in use are the glass, soft rubber and gum elastic. No. 8 to 10 for an ordinary adult patient. Glass catheters are the most general except in special cases; these cases being, perhaps, where a patient is delirious and it is best not to risk passing a glass instrument lest it get broken during the operation, and so injure the patient's urethra; or in cases where there may be any abnormal growth or tumour pressing on the bladder, and in such cases the danger is of making a false opening by

using a glass catheter; hence the use of soft rubber or gum elastic.

Glass or rubber catheters may be sterilised by boiling and gum elastic by lying in perchloride of mercury 1-2000 for several minutes. In cases where there is a perineum wound the nurse ought to fix a piece of rubber tubing to the end of the glass catheter used to save any urine dribbling back on the stitches.

To catheterise a patient the nurse must first sterilise her instrument, and put it in a vessel containing some warm antiseptic solution, boracic preferred, as if there be much catheterising it does not irritate the patient's urethra as some other antiseptics do. She must have another basin with some stronger antiseptic, also warm, and a few sterilised swabs of gauze or wool; a receiver for her swabs when used, and a urinal, or small vessel for the purpose.

After leaving all these things ready and the patient in position, the most usual being on her back with the knees drawn up, the nurse must scrub her hands thoroughly with soap and water, and disinfect them so as to render them surgically clean. She must then begin operations by sponging the labia and round about the urethra with the warm antiseptic solution prepared; this must be done thoroughly and conscientiously so as to be perfectly sure that no discharge whatever is left which may find its way with the catheter into the bladder. The nurse must remember all the time that the disease of cystitis is so very easily set up that she will be held responsible by her doctor for any carelessness in the performance of this duty. For my own part, I believe that where there is frequent catheterisation the patient is not unlikely to get cystitis, not through any carelessness on the part of the nurse, but from the constant passage of a foreign body into the bladder; yet this is only a reason why the nurse should be more particular than ever to be absolutely and scrupulously clean in all cases of this kind. The lips of the labia are then kept apart by the left hand, whilst the catheter is passed with the right, gently up into the bladder. No force whatever must be used. As soon as the urine begins to come freely the nurse must place her left hand over the region of the bladder and gently but firmly press so as to expel the contents and to make sure that the bladder is perfectly empty before withdrawing the catheter. In removing the catheter, if glass, the thumb of the right hand should be placed over the orifice, or if rubber the tube should be nipped in order to save any urine still contained in the tube being spilled. Before and after use a stream of water should be passed through the catheter from the eye downwards.

Some nurses believe in lubricating the catheter before passing, in this case sterilised vaseline, or oil, should be used. In this, as in all other branches of nursing, practice and absolute and surgical cleanliness are the chief things which lead to perfection.

The Scottish Railway Accident.

NURSING THE INJURED AT ARBROATH INFIRMARY.

THE first announcement that a terrible railway disaster had occurred within sight of the hospital—for Elliot Station, though about a mile distant, can be seen on ordinary clear days from our windows—was brought by a messenger, who asked us to be ready to take in any cases that were sent along, adding that he believed that a large number of persons were killed or injured. We were just experiencing one of the fiercest snow-storms that this district has ever known. The gale which accompanied it wrought fearful havoc, with the result that not a single telephone-wire remained intact, and telegraphic communication was entirely cut off. We had thus to depend upon our own resources. There are forty beds in the hospital. Of these, thirty-one were occupied, leaving nine available, and eight patients were immediately sent home to make additional room. These are contained in four wards—one of which is situated on the ground floor, and three upstairs—on which floor is also the operating-room. Two of the wards upstairs are male wards, the others are for females, while the downstairs ward is usually occupied by women. This last, fortunately, was cleared for the Christmas entertainment, so that we had a ward with nine empty beds at our disposal.

The nursing staff consists of a matron, a sister, and five other nurses. The whole staff was at once informed of what had occurred, and instantly commenced to prepare for the reception and treatment of the injured. Bandages, splints, and other mechanical appliances likely to be required were got in readiness, all available bedding for making extra beds was brought out, and a plentiful supply of hot-water bottles filled ready for use. The operating-room was also prepared for use. These and other preparations were completed before the first case arrived, so that there was not the slightest confusion by the time the sufferers began to be brought in. All those injured had been placed in another train and taken to Arbroath Station, from which place they were conveyed to the hospital, some in the one ambulance waggon of which the town boasts, others in cabs, according to their injuries. One of the surgeons drove directly from Elliot to the hospital, so as to arrive before the patients, while the other three went on to Arbroath with the train, and each accompanied one or more patients from the station to the hospital. There were sixteen persons in all brought in.

The outstanding feature of these cases was that the great majority of them suffered from fracture of the lower limbs, and that most of those who died had severe injuries of the internal organs. Beds were found for all of them, and by eight o'clock every case had been attended to—that is to say, put to bed, had the clothing removed, and splints or dressing applied—though it was past six o'clock before they began to arrive. Of course, a great amount of work yet remained to be done. The nursing of so many cases, most of which would in ordinary circumstances have had a special nurse to itself, was a serious problem, and as all communication with Dundee—railway, telegraphic, or telephonic—was entirely cut off, no assistance could be obtained from that quarter. Fortunately, two nurses were secured in town—one a member of the Edinburgh Nurses' Co-operative Association, who was nursing a private case, and another who had received hospital training, but was now no longer in the professional ranks. These formed the entire nursing staff until late in the afternoon of the following day, when three nurses arrived from Dundee. All, however, worked with that spirit which only those who

are truly devoted to their profession possess. During the night, or rather the early hours of the morning, no fewer than five patients passed away. Later on it was decided by the surgeons that the operation of suprapubic cystotomy could no longer be delayed in the case of a patient with a fractured pelvis, though in deference to his wishes attempts had been made to get a message through to Edinburgh or Dundee, summoning a specialist for that purpose. This, of course, entailed additional work on all the staff, but it was successfully accomplished before help arrived from outside. Altogether the staff has every reason to be satisfied with the good work done, and undoubtedly the incidents of that strenuous night's work will long remain fixed in the minds of those who took part in it.

Our Christmas Distribution.

THE following letters have been received by us from the recipient of parcels of garments which, through the kindness of our readers, we were able to distribute :—

THE Matron of the Evelina Hospital for Sick Children, Southwark, S.E., writes : I beg to acknowledge with very many thanks the present of useful clothing.

THE Matron of the West Ham and East London Hospital, Stratford, E., writes : The two parcels which you have so kindly sent to this hospital arrived safely. Will you please accept my very sincere thanks for the garments sent for our patients? The parcels contained the most useful assortment of clothing, and I can readily tell you with what pleasure and delight each gift will be received. Personally, I feel, and I am sure other matrons do too, that the organisation of this "Distribution of Clothing" from the offices of THE HOSPITAL is a most magnificent work and charity.

THE Secretary of the East London Hospital for Children, and Dispensary for Women, Shadwell, E., writes : I am desired by the board of management to tender you their best thanks for your very welcome present of clothing and cards, and to assure you that the gift is much appreciated.

THE Matron of Whitechapel Infirmary, Vallance Road, writes : I have received a large parcel of good clothing from you to be given to the poor. I assure you it is a most acceptable Christmas gift, and I shall make it my business to see that deserving poor persons get it. It is extremely kind of you to have thought of us, and believe me such kindness is highly appreciated at this infirmary.

THE Lady Superintendent of the East End Mothers' Lying-in Home, 394 and 396 Commercial Road, E., writes : Your annual expression of goodwill to our mothers and babies in the East End has duly arrived and was received with great pleasure. I beg to acknowledge the many warm garments so kindly sent, with most grateful thanks. The poor mothers here are in great need and are very thankful for any help they received and charmed to get a warm pretty garment for themselves and babies.

Death in our Ranks.

WE regret to announce the death of Miss D. M. Purser, a probationer at St. Bartholomew's Hospital on December 17 last. The cause of death was enteric fever and pneumonia, which she contracted during the discharge of her duties at the hospital. Miss Purser, who was 25 years of age, had previously had three years' training at the Cancer Hospital, Brompton. Her remains were interred at Highgate Cemetery on December 20.

Christmas in the Hospitals.

BY OUR SPECIAL REPORTERS.

As each Christmas passes it is encouraging to observe that there is not the faintest indication of any flagging on the part of matrons, sisters, nurses, and others responsible for the provision of seasonable entertainments in their efforts to afford patients in the wards the maximum of pleasure. When the practice was first started it was contended that this form of contributing to the sum of human happiness under conditions of pain and suffering, would cease to be pursued with zest directly it had lost the charm of novelty. But as a matter of fact, familiarity with the modes of celebrating Christmas in hospital and infirmary, instead of breeding apathy, has tended to increase enthusiasm; and a perusal of the reports supplied by our special reporters of visits to leading charitable institutions last week will convince even the incredulous that age does not wither, nor custom stale, the infinite variety of voluntary caterers for the amusement of the large class so entirely dependent upon others for any amelioration of their hard lot. Of course there is scope for anxiety and patience as well as for resourcefulness and ingenuity in devising and preparing for the entertainments; and there are, perhaps, misgivings lest failure, rather than success, should be the ultimate result. But for these there is ample compensation in the intense satisfaction derived from the contemplation of the joy the poor folks, who, though separated by sickness from their relatives at the great home festival of the year, have their attention effectually diverted from their own condition, and are able to indulge in at least a measure of that mirth which is the prevailing atmosphere elsewhere. So long as hospitals themselves are a necessity, it may be hoped that Christmas festivities will be maintained with all the spirit, all the brightness, and all the good temper, which marked them in the closing days of 1906. If they are a cause of gratification to the patients, they are a source of happiness to those who plan them, because the primary object in view is the happiness of others.

GUY'S.

CHRISTMAS at Guy's was, as usual, a great success. Its reputation was maintained, and even excelled that of former years. Taking a walk round the wards on Christmas Eve while the finishing touches were being added, one was struck with the original designs and with the artistic arrangement and grouping of colours. The pale splendour of one ward, which earned it the epithet of "The Lane by Moonlight," was thrown into contrast by the Oriental gayness of its neighbours' illuminated chrysanthemums. In another ward one stepped immediately under the shelter of a lych gate, while the accident ward boasted of a diminutive "wayside inn" quaintly formed of screens with a thatched roof. The surroundings themselves were almost sufficient to impart a jovial Christmas spirit, but as the day dawned there came other surprises. A present for every patient, and then the roast beef and plum puddings held sway. Music from the pianos, kindly lent to the wards, was heard on every side, and the grand finale arrived as the residents, transformed into "The Niggers," tramped into each ward to crack their jokes and sing their funny songs, to the joy of the children and convalescents. While the wards were having a right good time, the out-patients' department was packed with its hundreds of small guests, who devoured cake and bread and jam with amazing rapidity. The "cinematograph" was a huge source of pleasure to the youngsters, who greeted each picture with their own quaint remarks. The large Christmas tree was next stripped of its trophies, and finally a "parcel for mother" was

handed to each child as he or she reluctantly started for home. The side rooms were dreams of spring time, for one walked under the hanging flowers of laburnum and wistaria, and on into a bower of roses beyond where the tired waiters and visitors could refresh themselves with tea and its usual accompaniments. Not until the evening had well advanced did the strains of merriment die away, and then the glories of the decorations succumbed as the lights went out and the tired patients settled down to sleep and rest.

THE LONDON.

THE celebrations on Christmas Day at the London Hospital are distinguished by the excellence of their organisation; by the munificence of the gifts sent in from kind friends and sympathisers; and by the heartiness and goodwill with which all concerned do their utmost to promote the happiness and amusement of the inmates. The festivities begin and end on Christmas Day, so that they must necessarily start at an early hour, and in fact it was no more than four o'clock A.M. when a long procession of sisters and nurses, a hundred in all, paced solemnly into the wards bearing coloured lanterns in their hands and singing as they went some of the old, well-known carols. It took a long time to complete the rounds of all the wards, so that there was no very long interval between the departure of the carol-singers and the appearance of Father Christmas attended by two clowns and a bevy of fairies (little convalescent girls). On arriving at the wards Father Christmas found at each door a sack in which the sister had the presents for each patient wrapped up and directed. These presents are gifts from Sir Edgar and Lady Speyer and consist of a warm garment for each patient, such as a flannel shirt or petticoat, or knitted cardigan waistcoat. These were doled out by Father Christmas and distributed by his fairies. Nor were the sisters and nurses overlooked in this wholesale dispersal of presents, for there followed in Father Christmas's train a porter drawing a trolley piled high with fragrant violets, a gift from the resident medical officers to each sister and nurse in the hospital; a custom which started as long as twenty years ago. The next great event was dinner, and the thirty residents, appropriately attired as chefs, did the carving and had a very busy time of it. In the afternoon the men were allowed to smoke, and so ample were the gifts in this line sent by the chief firms of tobacconists, that each man received a new pipe, two ounces of tobacco, and a packet of cigarettes. At three o'clock began the entertainments, which went on without intermission until 7.30. Each entertainment lasted half an hour only, and each was given by a different troupe, causing the greatest possible amusement. At eight o'clock a dance for the wardmaids and scrubbers took place in the out-patients' hall, and they also got their share of the entertainments provided by the various troupes.

WESTMINSTER.

CAROLS by the boys of the Westminster Hospital choir ushered in Christmas Day at the Westminster Hospital. Then followed a visit from Father Christmas, who kindly supplied a present for every patient. Dinner, for those well enough to enjoy it, consisted of turkey and plum pudding, while for less advanced patients there was fish and custards. After dinner the men patients received permission to smoke. Entertainments were also given by the resident medical staff and students, and caused much fun and merriment. Considerable interest is taken each year in the monster bran pies which here are a peculiar feature of

CHRISTMAS IN THE HOSPITALS—Continued.

the Christmas Day festivities. Each sister has her own special bran pie, and ingenious brains and clever fingers are taxed to the utmost in order to contrive novelties every year. A huge plum pudding and an enormous bell, which descended to allow dips to be made in it, were among the most remarkable this year. One ward was decorated in Japanese style in honour of its bran pie, which took the shape of a gigantic Japanese lantern. A bran pie much appreciated was one made to resemble a portcullis, which, being the arms of Westminster was highly appropriate. But perhaps the most startling novelty, and certainly the most amusing, was the brain pie disguised as a savoy cabbage. Of course, the bran pies are all well stocked with presents, and the patients much enjoy the glorious uncertainty of a dip. For the children's ward a large Christmas tree, well laden with toys, was provided.

ST. BARTHOLOMEW'S.

THERE was an excellent entertainment in the Grand Hall at St. Bartholomew's Hospital on December 31, when the performance of the farcical romance, "His Excellency the Governor," was given by the amateur dramatic club and the musical society attached to the institution. The considerable number of inmates present heartily enjoyed the programme, and were enthusiastic in their applause. The whole of the parts were admirably portrayed. Of the leading characters, Mr. S. S. Strahan was Mr. John Baverstock, the private secretary; Mr. A. C. Wilson, Captain Charles Carew, A.D.C.; Mr. Vernon Favell, his Excellency Sir Montague Martin; Mrs. Walter Wood, Stella de Gex; Mrs. Noble, Mrs. Wentworth Bolingbroke; Miss Mary Strahan, Ethel Carlton; and Mr. H. Scawen, the Right Hon. Henry Carlton, M.P. The rest of the parts were played by Messrs. W. B. Grandage (Captain Rivers), C. B. D. Butcher (Major Kildare), R. S. Townsend (a sentry), Patrick Black (butler), L. J. Burra (footman), and E. Hopper (native servant). Mr. Vernon was stage manager, and Mr. A. C. Wilson assisted. The contributions of the Orchestral Society were "Past and Present," "March of the Boyards," "Mignon," "Masquerade," and "L'Estudiantina," and Mr. Edmund Maney conducted.

KING'S COLLEGE.

ALL the time-honoured customs and festivities were strictly adhered to at King's College Hospital this Christmas time. The nurses sang the old sweet carols, the usual festive fare was partaken of. On Boxing Day the patients' tea was celebrated and the choirboys from the Temple came and sang to the inmates. There was high revelry on Friday, December 28, when from ward to ward the resident staff and students made their way in various troupes, everywhere causing merriment and jollity by their amusing songs and performances. The festivities were wound up on December 31 by a Christmas-tree for the children. This was preceded by a representation of Punch and Judy. When this was over tea was handed round, and thus reinforced after the exertions caused by so much laughter, the little ones were able to turn their attention to the splendours of the magnificent Christmas-tree and to delight in the treasures that were presently dispersed among them. The Ralli ward, where these festivities were held, was a marvel of artistic decoration, and the rows of Chinese lanterns shed a softened glow on the beautiful flowers. It was difficult to remember that one was in a hospital ward, so fairy-like were the surroundings and so bright the faces of the onlookers. The Santa Claus Society sent presents to some of the wards, and members of the Society came themselves to distribute them.

CHARING CROSS.

A NEW departure was made at the Charing Cross Hospital in the matter of the decorations of the wards. These have gradually become such a tax upon the resources of the sisters and nurses, that it was decided this year to restrict all decorations to the tables and mantel-pieces and electric light and gas brackets. The cost of these for the whole of the hospital only amounted to £13, which was provided by the Board. The result of this innovation was a gain in every way. Attention was thus concentrated upon the softly-toned paper shades and the floral decorations in the centre and ends of the wards, and the sisters and nurses were relieved from a great strain upon their resources, and were also spared much physical exertion in the fixing up of the decorations, so that they were surprised to find themselves so much less tired this Christmas than ever before. On Christmas Day the first event was the singing of carols by the choir of St. Martin's Church. At four o'clock began the tea given by the sisters, to which each patient was allowed to invite two friends. Troupes of pierrots entertained the patients throughout the day, and the Ladies' Needlework Guild provided an article of clothing for every grown-up patient. The children were not forgotten either, for the Earl of Kilmorey had sent a huge collection of toys, and each child also received a toy from those sent by the proprietor of *Truth*. Nurses, past and present, took part in the festivities. On December 28 a splendid Christmas Tree was provided for all the little out-patients who had attended the hospital during the past year. The small guests were also provided with a good sit-down tea, while their parents and guardians partook of a buffet tea.

THE MIDDLESEX.

CHRISTMAS DAY began at the Middlesex Hospital with the presentation of gifts to the patients, most of which are sent by friends for this purpose, the remainder being provided from a special Christmas Tree Fund. Each of the adult patients received an article of warm clothing, or some such useful present, with, in addition, some tea and soap, whilst the children had toys, warm clothing, and soap. For dinner, in place of the usual hospital fare, turkeys and plum puddings were provided, and a good number of the visiting staff came round to assist in the arduous task of carving the turkeys, which in many cases they had themselves supplied. The wards were decorated after a more or less uniform system; the electric lights had coloured silk shades over them, whilst quantities of flowers and plants were tastefully arranged in different places, and the numerous fairy lights gave very pretty effects. From 2 P.M. to 4 P.M. the friends of the patients were admitted. The arrangements in the cancer wards were the same as in the general wards, and the nurses in these sang carols at 7.30 A.M. Celebrations of the Holy Communion were held in the chapel at 5.30, 6.30, and 7.30 for servants and nurses, and at 9.30 for night nurses and any patients able to attend. Morning service was held for the patients at 10 A.M. The nursing staff and servants of the hospital were not overlooked on Christmas Day, and all received useful presents and enjoyed a good Christmas dinner. On this day only they are allowed to circulate freely through the wards, which is a privilege always much appreciated. In Princess May and Percy wards there were Christmas trees which were dressed on Christmas Eve, but left untouched until the following Thursday and Friday, when the much-gazed-at treasures were at last bestowed upon the delighted children.

ST. MARY'S.

ON Christmas morning every patient in St. Mary's Hospital received a suitable present—the men shirts, the women

articles of underclothing, and the children toys. Those of the male patients who were well enough were allowed to smoke. There were three celebrations of the Holy Communion in the chapel. The service at 11 A.M. was fully choral, "Star of the East" being well rendered by the choir of nurses. Instead of the sermon three carols were sung, and at the close of the service Stainer's seven-fold "Amen." The wards were all decorated with plenty of evergreens and some very beautiful flowers. The Manners ward looked most spring-like with lovely blendings of green and yellow, and the children's wards, Crawshaw and De Hirsch, were particularly attractive. The children themselves, happily playing with their toys, were eager to show their new possessions to all visitors. Pianos were provided for every ward. The patients had visitors from three to four P.M.; then the great business of the evening, "The Ward Teas" began. The tables were artistically decorated with flowers and literally groaned under the weight of good things. The resident surgical, medical and obstetric officers worked hard to amuse the patients, and several of the nurses sang and played solos. The children's Christmas tree was held in the Board-room on Thursday, December 27.

ST. GEORGE'S.

CHRISTMAS DAY at St. George's Hospital was kept very quietly; the usual seasonable fare was provided, and the friends of the patients were allowed to visit them. On December 27 the customary Christmas tea was given, and the lady visitors, members of the Board, etc., attended in large numbers and added much to the enjoyment of the inmates, both by the gifts they so lavishly bestowed, and by the kindly chats they held with the patients. The little ones were rendered supremely happy by the stately Christmas-trees that delighted their dazzled eyes, and from which toys showered upon them in almost bewildering profusion. This hospital also came in for a share of the toys sent by *Truth*. On December 31 an entertainment, consisting mainly of a conjuring performance, took place in the board-room, and thither the patients were carried down and ranged round the room on their stretchers. It is an operation which occupies a considerable time and which requires no small amount of care and labour; indeed, an hour and a half is usually allotted to installing these helpless patients in their places. This year no fewer than 150 patients were able to be present.

ROYAL FREE.

It was a pleasant relief on Christmas Eve to exchange the slush of the street for the polished floors of the Royal Free Hospital. On that evening the season's festivities were already drawing to a climax, and every ward bore evidence of a quiet but happy expectation of what the morrow was to bring forth. Everywhere cheerfulness reigned. Each sister had arranged the decoration of her particular ward according to her own taste, and a most agreeable variety was the result—here a lavish display of flags, there a liberal distribution of evergreens, and elsewhere the soft, warm illumination obtained by an ingenious utilisation of Chinese lanterns. The monotony of hospital existence was broken to good purpose in the week before Christmas. A band of about thirty students went the round of the wards bearing Chinese lanterns on poles, singing carols and, more significant still, escorting Father Christmas, whose attendant satellites wheeled a stretcher laden with gifts. Each smiling patient received a parcel. Not content with this distribution the same ladies gave during the week two waxwork entertainments. Fittingly enough, however, Christmas Day witnessed the crowning fête. In the first place there was the usual relaxation of rule, and each patient enjoyed the privilege of inviting a friend to tea.

Then a second distribution of parcels took place, this time at the instance of the authorities, and much excited, loosening of string and fumbling with brown paper was witnessed. It was the children, however, who proved the occasion for the supreme event of the Christmastide. In accordance with generous custom, Sister "Boys" gathered to her ward not only the juveniles at present in the institution, but those also who had been inmates during the year, and there, round a resplendent Christmas tree, a crowd of happy wee folk enjoyed a blissful hour rare enough in their straitened experience.

TOTTENHAM.

CHRISTMAS festivities at the Tottenham Hospital were brought to a close on Saturday evening last by a children's party. The function was held in one of the new wards which has not yet been opened; a spacious lofty hall, handsomely appointed. There were about 150 children present, including present and past patients, and their brothers and sisters. All the adult patients who were equal to it were also present, and a number of visitors, including many Governors. After a tea worthy of the occasion, and bonbons, a display of Maskelyne and Devant's living pictures was given. The display was of unusual excellence, and amused the children immensely. The proceedings were brought to a close in the good old-fashioned way. When the lantern sheet was removed a huge Christmas-tree was revealed, reaching from floor to ceiling, and richly laden with toys in great variety. The delight of the children knew no bounds, especially when Dr. Chappell, disguised as Father Christmas, proceeded to distribute the tree's burden. The party was organised by the matron, who was ably seconded by Mr. F. W. Drewett, the director, and backed up by the nurses. The entire cost of the party was collected by the matron, as usual, through the Christmas Tree and Entertainment Fund, which was well supported by the Governors and others with gifts in money and kind.

QUEEN CHARLOTTE'S.

In a hospital like Queen Charlotte's little can be done for the entertainment of the patients, scattered about as they are in a number of small wards, and requiring quiet as part of their cure. The long corridors on each floor, however, were festooned with paper chains, and each ward boasted its sprig of holly. Christmas dinner must have been a formidable function for housekeeper and cook. At 9 A.M. the night nurses dined, and at one o'clock all the rest of the hospital staff, matron, sisters, doctors, students, and nurses—those in the hospital and the others who were doing their last month on the districts—a total altogether of seventy-eight. In spite of the fact that most of the nurses in this, as in other lying-in hospitals, are but birds of passage, the dinner was unmarred by any sense of estrangement. In a short time they might be scattered all over the world, never to meet again; but for this day and this hour they were bound by a common kinship, the memory of which would return to them—with the flush of their early ambitions and resolutions—in years to come. "Husbands' tea" in the wards followed as a natural sequence; and when the work of the day was done, the babies washed and fed, and the mothers comfortably settled, the nurses proceeded to keep up their good old custom of Christmas Night. Forming in a long procession, white-robed and white-capped, like a celestial choir, carrying coloured lanterns in their hands and singing carols, they went the rounds of the darkened wards. Perhaps the mothers, lying peacefully there and feeling the soft warmth of their tender babes beside them, could realise more than most people that wonderful Birth in Bethlehem 1900 years ago.

CHRISTMAS IN THE HOSPITALS—continued.

SAMARITAN FREE.

EAST LONDON CHILDREN'S.

A PROFUSION of decoration distinguished the Samaritan Free Hospital, and testified to the ingenuity of the nurses. A portly Father Christmas, in snow-flecked garments, greeted the visitor inside the door, and none would guess that the red cloak covered an old sack stuffed with straw. The hall and staircase made a bower of evergreen, gleaming with fairy lamps and holly berries. Upstairs, on the first floor, the decorations had been carried out in Japanese style throughout. The archways were very prettily festooned with trailing twigs of green. In the centre of each was an inverted Japanese umbrella, from the spikes of which were suspended coloured lanterns, while a multitude of bells, silver and gold, of all sizes, hung from the glistening boughs. The wards made an equally tasteful display, with dado and frieze of white Japanese papers, and perpendicular lines of silver tinsel and green between the windows, the lamps softened with a variety of shades, while cleverly-fashioned paper butterflies perched here and there over the beds. Fortunately, although there were few empty beds, there were not many very bad cases, so most of the patients were able to avail themselves of the privilege of having their friends to tea on Christmas Day—and a merry tea-party it was.

HOSPITAL FOR SICK CHILDREN.

EVERY small inmate of the Hospital for Sick Children found, on awaking on Christmas Day, that Santa Claus had been on his rounds in the night and had left a stocking by the side of each cot, stuffed with the most desirable treasures. Carols having been sung by the nurses, a grotesque procession paraded through the wards to the great delight of the youngsters. It consisted of the residents got up in the most startling garbs, including, of course, Father Christmas and a plum pudding, as well as Mother Goose, a mastiff, and a lion. On December 27 the out-patients, to the number of 250, had their share in the Christmas festivities. The proceedings began with tea, after which there was a Punch and Judy show, followed by a distribution of presents from a mighty Christmas tree. December 28 was the great day for the in-patients, to which all the children looked forward with the utmost impatience, for on that day there was a most lovely tree set up in each ward, and every little boy and girl received so many really beautiful presents that they must have thought themselves transported to fairy-land, where, as all children know, you have only to wish and you get all that you want. The Christmas trees were, of course, the centre of attraction in each ward, and several of them had some novelties to display. One tree had a number of birds perched on the branches, giving it a most realistic air, and in another ward a flight of swallows cunningly poised on an almost invisible wire appeared to be winging their way to the tree. Most of the trees shimmered with long threads of tinsel, resembling hoarfrost in the bright sunlight; and all of them glittered and shone with so brave a glory that it was no wonder that at first the little occupants of the cots sat and gazed at them in silent admiration, not unmixed with awe. Dolls and trumpets perched on the branches, and underneath each tree was a great pile of presents, books, and playthings of all kinds, which a little later were distributed among the eager, happy children. The beautiful flowers which decorated the tables in the centre of each ward afforded much scope for artistic arrangement, and most successful were the various achievements in this line. The paper shades for the electric lights added greatly to the effect, toning the scheme of table decoration. It was a wonderful day for the little sufferers and one that will form a bright spot in their memories for many a long year to come.

THE committee of the East London Hospital for Children believe in keeping Noel with an unstinted holiday. All the forces were concentrated on Saturday's celebration. Chinese lanterns and a charming arrangement of evergreens greeted the visitor on crossing the threshold to tell of the festivities afoot. It was a promise of gaiety well borne out. The hub and centre of it all was the out-patients' hall. There, after memorable tea parties in the five wards, the majority of the little folks were assembled. It was a scene to remember, this gathering in the spacious hall whose walls, brightly decorated that day, must witness many a tragic incident in the drama of hospital life. A screen raised at one end served the double purpose of displaying cinematograph pictures and concealing a mystery whose final unveiling was to be the climax of the occasion. Squeezed into a little room at the side, and, indeed, overflowing it, a dozen bandmen of the 2nd Life Guards discoursed the brightest of music, and incidentally made a brave show in their scarlet uniforms. There were other scarlet uniforms in the room. The wearers, little soldiers of suffering, laid on mattresses or seated in chairs, had the places of honour among the audience. It was an appreciative audience, too, and the doctors, nurses, students, and visitors enjoyed everything almost as much as the little patients themselves. The moment for revealing the secret brought with it an unrehearsed surprise. Hardly had the sheet been lowered, disclosing for one breathless moment a pair of gigantic Christmas trees, bright with toys and sparkling with lights, when all at once the room was plunged in darkness. But this was speedily remedied, and soon Father Christmas stepped forward and began to distribute his treasures, the wee folks' happiness at this stage reaching a point beyond expression. Among those who contributed to the success of the festival by gifts of toys and clothing were the Princess of Wales and her children.

PADDINGTON GREEN CHILDREN'S.

On Christmas Eve each little patient in Paddington Green Children's Hospital hung up the bag which was provided instead of a stocking on the end of its cot, in simple happy trust of what the mysterious night would bring forth; and Santa Claus, in the person of Miss McGregor, the matron, duly filled it up with toys and gifts from nurses and unknown friends. Then, two days later, came the entertainment. The glories of the Christmas tree, illuminated with numberless tiny lamps and electric light, and laden with toys, were partially visible through the windows even to the passers-by outside. There were toys for everyone—such as many of these poor little mites had never dreamed of possessing. In the upper, or surgical, ward the cots were all pushed up to the top, close together, where the little occupants could have the best view of the magic-lantern pictures kindly shown by Dr. Herbert E. Friend; and all the medical patients who could possibly be moved were carried up and placed in chairs in the front. An excellent collection of slides was exhibited. "One of our Japanese Allies" was thrown on the screen—a little Japanese child who had inhabited one of the cots—and the greeting to the matron and nurses was received with warm applause. When a placard on the screen announced "The End," the little ones sat still in their chairs, patient and hopeful; and even when a few bars of *God Save the King* were played on the piano no one budged till the lights were turned on, and the nurses picked up the tiny ones and carried them off to bed. Two of them had already fallen asleep in their cots. In the Board-room tea was dispensed by some of the sisters to the numerous visitors.

The Hospital.

Nursing Section.

Contributions for "THE HOSPITAL," should be addressed to the EDITOR, "THE HOSPITAL"
NURSING SECTION, 28 & 29 Southampton Street, Strand, London, W.C.

No. 1,062.—VOL. XLI.

SATURDAY, JANUARY 19, 1907.

Notes on News from the Nursing World.

NURSES AND THE EARTHQUAKE IN JAMAICA.

THE announcement on Wednesday of the news that Kingston, the capital of Jamaica, had been visited by an earthquake on Monday afternoon was accompanied by an intimation that "the military hospital" had been burnt. But, as a matter of fact, there is no military hospital at Kingston, and neither members of Queen Alexandra's Imperial Military Nursing Service nor orderlies belonging to the Royal Army Medical Corps are serving in the ruined city. There is, however, a large general hospital, with a matron and a staff of about a score of nurses.

THE MURDEROUS ATTACK ON A MEMBER OF THE NURSES' CO-OPERATION.

WE greatly regret the fact that Miss Fruzenah Low, an English nurse travelling abroad in pursuit of her duties, was murderously attacked on Saturday evening in the express from Turin to Paris, receiving such serious injuries that it is reported should she recover it will be three months before she can be moved. Miss Low was one of the most capable nurses attached to the Nurses' Co-operation in London. The assault, which was clearly perpetrated for the sake of plunder, was as dastardly as it was unexpected; and the sympathy of all nurses will be extended to the unfortunate victim of a miscreant's cupidity. Naturally enough the advocates of outdoor uniform urge that if she had been attired as a nurse it would probably not have been considered worth while to rob her. On the other hand, it may be said that it is quite unusual abroad for a nurse to wear uniform, and that if Miss Low had done so she would have attracted more attention than she desired.

TEN PER CENT. OF NURSES OFF DUTY.

THE report presented to the Local Government Board by Mr. Jenner Fust and Dr. Fuller, who have been investigating the administration of the Salford Poor-law Hospital at Hope, proves the necessity for sweeping reforms. The inspectors found that the crib bedsteads in the male imbecile block are in a state of disrepair; that the male imbecile sick ward and padded rooms are not clean; that the cupboards are untidy; that the clothing and stores are kept anyhow and anywhere; that the laundry arrangements are inadequate; that the dietary requires revision; that the infirmary is materially understaffed; and, most serious of all, that the medical officer has rightly attributed much of the sickness among the nurses to the faulty condition of the drains. "In many cases,"

they add, "rat runs were observable, and rat holes were seen outside." As to the sickness of the nurses, they found that from October 1st, 1905, to October 1st, 1906, 24 nurses were off duty for 532 days, which gives on a total staff of 42 nurses a rate of 10 per cent. always off duty. When will the Local Government Board do its duty in the matter of this scandalous Poor-law Hospital, the condition of which is here shown to be a disgrace to Lancashire and, indeed, to the whole country.

HER PATIENTS OR HER BOOKS?

No hospital matron ought to be placed in the predicament of having to choose whether she should neglect her patients or her books. This is, however, the position in which, according to the Chairman of the Board responsible for the government of the Guildford Isolation Hospital, the matron of that institution has lately been placed. It is satisfactory to learn that she did not neglect the patients. Of course, the books ought not to be neglected either, but though the matron admits that she agreed to keep them, she cannot be blamed because the number of patients in the Fever Hospital has for some time been so great as to require her undivided attention. The discussion at the last meeting of the Board reflects little credit on those who took part in it, and the same may be said of those who voted for a proposal, "that the matron be instructed to keep the books in future, and that if she finds it impossible to do so, she must pay out of her own pocket for them to be kept for her." The majority, however, objected to this ungenerous attitude, and adopted the report of the committee, who advised a small payment to a clerk who had posted the books up to date.

CHANGES IN THE MILITARY NURSING SERVICE.

WE are officially informed that the following ladies have been appointed staff nurses in Queen Alexandra's Imperial Military Nursing Service: the Misses F. A. Loseby (Army Nursing Service Reserve), E. M. Lovell, C. Macrae, A. B. Nunn, A. Weir, H. M. Barnett, I. M. Johnston, and B. M. Nye. A number of changes have also been made in the service. Miss C. Hutton Potts, matron, has been transferred from the hospital at Middelburg, Transvaal, to the hospital at Standerton, South Africa. Sister S. Smyth has been transferred from Cambridge Hospital, Aldershot, to the Millbank Hospital; M. M. Bond to the Cambridge Hospital, Aldershot, from Netley; E. C. Cheetham from Curragh and K. A. Allsop from Devonport, to the Herbert Hospital, Woolwich; A. Row

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to Devonport, from Portsmouth; A. Guthrie from Harrismith to Bloemfontein; R. Osborne from Bloemfontein to Standerton; L. M. Lyall from Bloemfontein to Harrismith; A. L. Walker, from Aldershot to the ss. *Plassy* for Indian troopship service; M. Walker, from England, and F. M. MacGregor, from Middelburg, to Pretoria; and E. M. Denne from England to Bloemfontein. Staff Nurse G. S. Jacob has been transferred from the Connaught Hospital, Aldershot, to the Herbert Hospital, Woolwich; F. A. L. Smith, from York to Millbank; M. Barton, from Chatham to Devonport; E. K. Kaberry, from Millbank to Woolwich; A. S. Siddons, from Gibraltar to Netley; H. A. Hare, from Colchester to Devonport; M. Clements, from Colchester to Curragh; L. Belcher, from Woolwich, and S. N. Daly, from Hounslow, to Shorncliffe; M. German, from Gosport, A. A. Steer, from Millbank, and E. St. Quintin, from the Connaught Hospital, Aldershot, to Devonport. On appointment, Staff Nurses G. H. Sellar, B. M. Nye, and I. M. Johnston, have been sent to Netley; K. F. G. Skinner and A. B. Nunn to Aldershot; N. E. Smith, and E. H. Davies to York; C. C. M. Gibb to Portsmouth; C. H. MacCarthy and M. Ironside to Colchester; S. M. Wooler to Chatham; E. R. Collins to Hounslow; F. E. Morton and C. Macrae to Woolwich; K. F. Fawcett and L. A. Ephgrave to Shorncliffe; E. M. M. Malim to Gosport; A. Weir and N. Stewart to Devonport; H. M. Barnett and L. A. Burgess to Millbank; and F. A. Loseby (Army Nursing Service Reserve) to Bloemfontein. The promotions are: Staff Nurses K. A. Allsop, L. Belcher, C. T. Bilton, H. A. L. Jack, A. Rowe, D. J. Saunder, M. Clements, L. Cunningham, H. A. Hare, F. N. Roberts, F. A. L. Smith, and P. Steele, to be sisters; and Staff Nurses C. A. Coats, G. A. Aitchison, F. E. Manfield, A. M. Phillips, A. J. St. Clair, and D. M. Smith, have been confirmed in their appointments.

ALLEGED DEARTH OF NURSES.

It is stated in one of the Manchester papers that there is "an extraordinary dearth of nurses in London." But the only evidence cited in support of the statement is that a particular institution advertised for a nurse and did not receive a single reply. As the name of the institution is not given, we are unable to estimate the value even of this proof. But two causes are suggested as the explanation of the alleged dearth. One is that the number of "medical institutions" increase more rapidly than the number of trained nurses—a hypothesis the accuracy of which we beg leave to doubt. Our contemporary goes on to say that much harm is done to the profession by such an incident as occurred the other day at West Ham Infirmary, where a nurse's eyesight was injured by the conduct of a typhoid fever patient. We have already expressed our regret at this incident, but it has no more to do with the point at issue than with the circulation of the paper in which it appeared. If there be any dearth of nurses, which we strongly doubt—to our knowledge an advertiser in our columns received 38 applica-

tions last week for a post offering no special inducements—it is not, we are convinced, because of an indisposition on any nurse's part to face the inevitable risks of a great calling.

HACKNEY UNION INFIRMARY.

THE Hackney Guardians have had under consideration a letter from the Hackney coroner forwarding the rider of the jury to their verdict, which we quoted a fortnight ago, but apparently it is not intended to make any addition to the nursing staff. The Chairman of the Infirmary Committee states that the Guardians have "adopted the system in general use in hospitals and infirmaries," and avers that "if they were to put two nurses for every one now on night duty they would increase their wages and bread and washing account by over £1,300 per annum." One suggestion was that in the unavoidable absence of the charge nurse from the ward a probationer should be available; and we are quite certain that in no well-regulated hospital or infirmary is a ward containing a number of sick persons left without a nurse during the night.

THE STATE EXAMINATION IN NEW ZEALAND.

It appears from a report prepared by the Lady Superintendent of the Auckland District Hospital, relating to the State examination of nurses in New Zealand, that in December, 1905, 39 out of the 84 certificated nurses in that institution, or 46.4 per cent., were successful in passing this examination, as compared with a percentage of 37 successful candidates at the Wellington Hospital and a percentage of 3 at the Christchurch Hospital. It is not easy for English matrons to realise the difficulties under which the work of training nurses is carried on in New Zealand, or the beneficial effect exercised by the institution of an independent examination with a high standard. The percentage of successful candidates at the Auckland and Wellington Hospitals represents an amount of serious work on which the authorities are to be congratulated, and we have every expectation in the near future of seeing the figures considerably raised.

COMPLAINTS AGAINST AN ISOLATION HOSPITAL MATRON.

THE Winchcombe Rural District Council have had under consideration a series of complaints made by a former patient against the matron of the Isolation Hospital. Both the matron and the author of the complaints were present throughout the investigation, and it was wisely decided to admit the representatives of the Press. The most serious accusations were that the complainant's children were ill-treated by the matron when they were in the hospital; that while he himself was there she generally neglected her duties, and in various ways misbehaved herself. A practical answer to the first of these charges was that the complainant and his children are now in excellent health, which could scarcely have been the case if they had been badly treated at the hospital; and as to the others, they were denied *in toto*. The only witness called to support them was a servant at the institution, who had signed the papers written by the complainant. She confessed that she had

never read them. On the other side, the solicitor for the matron, in his examination of the complainant, elicited replies of such a character that the Council, without deliberation, declared themselves satisfied that his charges were not proved, and ought not to have been made.

INFIRMARY PATIENTS WITHOUT NURSES.

THE King's Lynn Guardians have decided by a majority of 11 votes to 8 not to proceed with the appointment of an additional untrained nurse. This determination has been arrived at in face of the fact that, under existing conditions, the infirmary at Lynn is left every day for two hours and a half without any nurses. The Rev. A. H. Hayes, who, in quoting the fact, challenged contradiction and met with no response, said that it was impossible to avoid this with the present staff of nurses. But although he merely advocated the modest expedient of engaging an untrained nurse, he could not carry the majority with him. The majority appear to favour, as an alternative, that the night nurses should work 84 hours a week, and the day nurses for 76; and the probability of the serious consequences which may ensue owing to the absence of any nurse from the wards for two hours and a half does not seem to have impressed the Guardians. Yet King's Lynn is within a few miles of Sandringham!

FEES FOR LECTURES.

THE Carlisle Guardians, after considering the question a second time, have decided to allow the sum of fifteen guineas to be expended on lectures to the probationers at the Fusehill Workhouse. This is not an innovation, but there appears to have been doubts as to whether it was advisable to spend the amount again. The medical officer, however, explained that the work consisted not only in the preparation and delivery of the lectures, but in correcting and revising the probationers' notes, and, on the approach of the examinations, tendering further assistance. The course of training is for three years, and the lectures extend over six months in each year. At present there are but four probationers. The cost is well repaid by the higher class of women attracted to poor-law work in those Unions where, through the public spirit of the Guardians, adequate instruction is provided to probationers.

THE NEW LOCAL GOVERNMENT BOARD ORDER.

WE recently stated that an order had been issued by the Local Government Board with regard to the management of sick wards of Chelmsford Workhouse. As similar orders are in force at Farnham and Basingstoke Workhouses, and another is about to be issued to the Rotherham Guardians, the substance of the document may be interesting to some of our readers. There are two Articles, the first of which provides that it shall be the duty of the superintendent nurse to visit each of the sick and lying-in wards of the Workhouse daily, and to see that these wards have been duly cleansed and are properly warmed and ventilated. Further, that such arrangements are made as may be necessary

for the proper care of and attendance upon the inmates both by day and during the night. According to Article II. the duty of making morning and nightly visits to the sick and lying-in wards of the workhouse is to cease to be part of the duties of the master or matron, as the case may be, though, with this exception, nothing in the Order is to affect the duties of the master or matron so far as these duties relate to the personal control of the workhouse.

"MOTHER HILDA."

A FEW weeks ago we recorded the death, under the saddest possible circumstances, of a nurse who was refused admission to a religious order because it was not considered that she possessed the necessary qualities for the work. Mother Hilda was another devoted woman who in early life was occupied in nursing, but subsequently became the head of a religious organisation, a post which she filled to the satisfaction and benefit of all who were associated with her. This venerable lady, who was known as Mother Hilda Mary Stewart, of West Malling Abbey, recently passed away in the 78th year of her age. In her early days she was actively engaged in attending the sufferers from cholera during the epidemic, and continued nursing work as one of the sisters at St. Saviour's Hospital, Osnaburgh Street, London, until in 1868 the opportunity came for her to accept the Benedictine rule. She was appointed Superior of a religious community, first at Feltham, then at Twickenham, and finally in 1892 she went to West Malling Abbey.

HOSPITAL AND HOME FOR INCURABLE CHILDREN.

ON Tuesday, last week, the annual "At Home" of the Hospital and Home for Incurable Children was held at Northcourt, Hampstead, and was well attended. The large room was filled by three o'clock in the afternoon, when some of the children sang carols very prettily, Miss Duff, who has taken much trouble in training them, accompanying them on the harmonium. Considering all the disabilities from which the children suffer, the result did her great credit. After tea, a concert brought the proceedings to a satisfactory close. We hope that the strong support given to this year's "At Home" by local visitors presages additional contributions to the hospital, which is doing good work and is in need of further help.

SHORT ITEMS.

THE annual concerts for the nursing staff of St. George's Hospital were held in the Board-room last week, the concerts being personally arranged by Princess Victoria of Schleswig-Holstein.—Miss Rednall, who has been working on the staff of the Society of Chartered Nurses in London, has taken the Nursing Institution at Chelmsford. She was trained at the Royal Free Hospital, London.—The first Pound Day at the General Lying-in Hospital, York Road, London, was held on Tuesday last, when many friends and ex-nurses, either by post or personally, sent in gifts.

The Nursing Outlook.

"From magnanimity, all fears above;
From nobler recompense, above applause,
Which owes to man's short outlook all its charm."

THE HEALTH OF NURSES AND SICK PAY.

WE have before us some interesting facts relating to the health of the working nurse. They include all classes of nurses, but largely those engaged in private work. The returns for 1,400 nurses show, over a period of years, that the average annual sickness is practically uniform in amount, and that about 18 per cent. of the nurses have been disabled each year by accident or illness. The percentage of severe cases is shown by the circumstance that 54 per cent. of the invalid nurses have suffered from illness disabling them for from five to 52 weeks in each year. Fourteen per cent. have suffered from more than one illness during the same year. More than 80 per cent. of the sick were attacked by acute specific disease; about 14 per cent. by diseases of the alimentary canal; some 13 per cent. by functional nervous disease; 13 per cent. were cases of accident and operation, and a similar number suffered from diseases of the respiratory organs, and from general disease and debility. It is not a little remarkable that the number of patients, year by year, in each class of disease, shows marked uniformity. We consider 18 per cent., in view of the character of a nurse's work, to be a surprisingly small percentage of illness amongst so large a body of nurses of different ages, discharging their duties in various branches of their profession, and so representing the average risk which every nurse has to incur. Still, when it is made clear, that one in five of the whole body of working nurses do in fact suffer, each year, from severe illness, which incapacitates them for work for several weeks, we hope no nurse of average intelligence will be likely to overlook the importance, in her own case, of underwriting this risk, by taking out a policy for sick pay in the Royal National Pension Fund for Nurses. It would be a useful and desirable plan, for the authorities of each training school, to keep a register of all cases of illness, which occur among the nurses each year, and to publish a few statistics embodying their experience in this matter.

No better service can be rendered to any nurse, by the authorities of her training school, than to impress upon her the importance of insuring against sickness, directly she receives her certificate of training. The earlier the nurse exhibits this measure of thrift, the greater will be her security, and the smaller will be the payment, which this necessary protection will cost her. There is a general idea amongst nurses, that, because they are young, they need have no care to provide against the day of sick-

ness, because so many of them are robustly well. In practice, as the statistics and information show, sickness very frequently attacks the younger women, owing to the circumstance, that they have not become habituated to the atmosphere of sickness, and that they are apt to disregard certain precautions, when working on their own account, especially in regard to regular and continuous exercise, which renders them peculiarly liable to attack. In our view, the best of many good features of the Royal National Pension Fund for Nurses is, that, every nurse, who takes out a policy, if she enters for sick pay in the days when she is strong and well, can make provision for her whole life, so that her mind may be free from anxiety as to the future. So far as we have been able to ascertain, from some ten years' experience, one nurse out of every hundred, that is 1 per cent. of the whole body, become permanently incapacitated during the years of their working life. This fact, if it could be brought home to the mind of every nurse, would certainly make each worker alive to the importance of sick-pay provision. It becomes more and more necessary, to impress upon each nurse the importance of being insured against the day of sickness. If this could be brought clearly home, the number of those insured against sickness would increase rapidly each year.

We note that many nurses, who are working in institutions, feel that there is no need of sick pay provision in their case, because the authorities make arrangements for their treatment and care when ill. This is no doubt true, of the majority, at any rate, of the best administered institutions employing nurses, but when the period of convalescence arrives, those nurses who possess a sick pay policy are in a position to take an adequate holiday, in comfort, and to thereby, frequently, lessen the period of convalescence. It is essential that all working nurses, during their years of service, should, as far as possible, protect themselves against the loss and expense due to illness. This can readily be done by the exhibition of a minimum of thrift, providing a sick-pay policy is taken out by a nurse when she becomes certificated, because the younger the nurse the smaller is the premium which she will have to pay during each year of her working life. This fact, coupled with the point we have just made in regard to convalescence, should convince the educated nurse, at any rate, that the small sum she sets aside, each year, as a provision against illness, is the wisest expenditure she can make. The success of the Royal National Pension Fund has been remarkable and satisfactory. It has already brought great comfort and given great strength to working nurses as a body. Both these advantages would be greatly extended, if every working nurse had the wisdom to protect herself, by the possession of a sick-pay policy in the Pension Fund.

The Care and Nursing of the Insane.

By PERCY J. BAILY, M.B., C.M.Edin., Medical Superintendent of Hanwell Asylum.

II.—NURSING THE SICK.

(Continued from page 205.)

6. THE ADMINISTRATION OF MEDICINE.

The nurse must always bear in mind that all medicines are composed of more or less potent drugs which, when introduced into the blood, exert some sort of influence over the functions of the various organs of the body. Very many of them are powerful poisons, and of these naturally only small doses are ordered. Medicinal agents may be used to produce either a local effect upon the part to which they are applied or a general effect upon the whole system. In the latter case they must be introduced into the blood-stream.

The various channels by which drugs may be administered are: (1) The mouth; (2) the lungs; (3) the skin; (4) the bowel.

1. The Mouth.

The vast majority of medicines are given by the mouth, are swallowed, and are absorbed into the blood from the stomach or upper part of the intestine. Either liquid or solid substances can be given in this way. The liquids are generally dispensed in the form of mixtures, but some strongly flavoured liquids, like turpentine or castor oil, may be administered in gelatine capsules. Oils like castor oil or cod-liver oil may be given as emulsions. Solid substances may be given by the mouth either in the form of pills, powders, or lozenges.

Mixtures are usually prescribed in bottles holding twelve or six ounces, and in both sizes there are as a rule twelve doses. Occasionally eight-ounce bottles are used containing either eight or sixteen doses. Before pouring the dose out the nurse should make a routine practice of carefully reading the directions on the bottle and the name of the patient. In this way only can mistakes which may lead to the most serious consequences be avoided. The instructions as to the time and method of administration must always be accurately carried out. The bottle should always be thoroughly shaken, even if this is not stated on the label. In pouring out the dose the bottle should be held with the label upwards, so that if a drop should cling to the lip of the bottle, it may afterwards run down the side without passing over and soiling the label. The dose must be carefully measured in a medicine measure, which should be held perfectly level. The quantity is usually expressed in spoonfuls, which have a certain definite meaning and may be written in symbols as follows:

Two tablespoonfuls equal one ounce (3j.).

One teaspoonful equals half an ounce (3ss.).

One teaspoonful equals one drachm (3j.).

One dessertspoonful equals two drachms (3ij.).

A drop or minim is the 60th part of a drachm (mij.).

It will thus be seen that one tablespoonful is four times as much as one teaspoonful, and that one ounce contains eight teaspoonfuls or drachms. When the dose is ordered twice daily it should be given at 10 A.M. and 5 P.M.; if three times daily at

10 A.M., 3 P.M., and 7 P.M.; if four times daily at 10 A.M., and 2, 6, and 10 P.M. Sometimes a dose is ordered to be taken three times daily before or after meals; in the former case it should be given about 15 or 20 minutes before food is taken, and in the latter case immediately after the meal is finished.

Certain forms of medicines are always given at particular times of the day. Sleeping draughts, for example, are given at bed-time or at the time that the patient is composed for the night and not likely to be again disturbed. Saline aperient draughts, seidlitz powders, and black draughts should always be given in the morning, at least an hour before the patient takes his morning meal. On the other hand, aperients which take some hours to act are usually administered at night, at or about bed-time. Drugs which are likely to upset the stomach and produce nausea are usually ordered after meals, as cod-liver oil or mixtures containing iron. Also all mixtures which contain arsenic are always given on a full stomach. Many more examples might be given, but enough has been said to show the importance of strictly carrying out the instructions given.

As soon as the dose has been administered the medicine measure should be carefully washed and the bottle well corked and locked away in a special cupboard. On no account should it be possible for the patient ever to reach the medicine. This is especially the case in dealing with lunatics who might thus find a ready means of attempting, perhaps successfully, to commit suicide.

Pills usually contain drugs which are either not readily soluble, and are therefore difficult to administer in the form of mixtures, or which have a very nauseous taste. Many patients have great difficulty in swallowing pills, this difficulty usually arising from nervousness. If the pill be placed on the tongue and a mouthful of water then taken and swallowed the pill will usually be swept down the throat, or it may be cut up into a coarse powder and mixed with a little jam, in which form it can usually be swallowed by the most fastidious person.

Powders may either be placed on the tongue and then washed down with a gulp of water, or they may be mixed with a little jam.

Lozenges frequently contain drugs which are intended to have some local effect upon the mucous membrane of the mouth or throat. They should be kept in the mouth until they are slowly dissolved by the action of the salivary juices. They may also, however, contain drugs which are intended to be absorbed into the blood, such as opium or ipecacuanha. Various local appliances may be made to the mucous membrane of the pharynx and mouth by means of sprays, syringes, and brushes.

The Lungs.

The only drugs which can easily be introduced into the blood through this channel must be in the form of gases or fluids which very rapidly evaporate; and which may therefore be considered as gases. These are used in order to produce anaesthesia (unconsciousness of pain) during various surgical

operations. They include laughing gas, chloroform, ether, and some others.

Various volatile substances are, however, often breathed into the lungs in order to produce some local effect upon the mucous membrane of the throat and air passages. Such applications are called inhalations. Commonly the vehicle which is used is steam, the effect of the drug being frequently greatly enhanced by the heat and moisture which thus accompany it—or the drug may be inhaled as a very finely divided solution in the form of a spray; or, lastly, the inhalation may be in the form of fumes produced by ignition. There are many special forms of apparatus to be obtained for producing inhalations, but the simplest one is an ordinary jug, into which some boiling water is poured. If the steam is

to be medicated a certain amount of the drug, according to instructions, is put into the water and the neck of the jug is surrounded with a folded towel. The patient then places his mouth and nose over the jug and inhales the rising vapour. The jug should be wrapped round with flannel in order that the contents may retain their heat as long as possible.

Briefly, the chief effects which are sought to be obtained by inhalations are to soothe irritable states of the mucous membrane in the early stages of inflammatory conditions, such as acute bronchitis, or to stimulate the bronchial secretion, and thus assist in the removal of expectoration in case of chronic bronchitis or to relieve spasm as in some forms of asthma.

The Nurses' Clinic.

THE DISTRICT NURSE AND EPILEPSY.

EXCEPT when epilepsy is complicated by some other complaint, the District Nurse is seldom called in for the express purpose of attending to an epileptic patient, but the disease is so sadly common among the poor that in every district of an average size she will certainly find in the houses she visits several persons suffering from it in its varying degrees. Epileptic seizures vary greatly in intensity, but still more in frequency. A man may be, strictly speaking, "subject to epilepsy," and yet the fits occur at such long intervals that they are unknown to his employers, and make no practical difference in the market value of his day's work; or the fits may be of sufficient frequency to confine him to certain classes of work, or it may be impossible for him to obtain any employment at all. In severe cases the fits may number from three to twenty or even more in the course of twenty-four hours. In some cases they occur regularly on certain days of the week, but as a rule there is great variability on this point.

The disease is said to attack females more frequently than males, but the district nurse's experience gives her exactly the opposite impression. The causes of epilepsy are not known, but the patient's history is usually one of delicate nervous organisation, overwork, harsh treatment, or severe mental shock. The symptoms are: ghastly pallor; a piercing shriek; the patient falls down as if shot; there is complete unconsciousness; the tongue is bitten; the limbs are violently jerked; in a few minutes the convulsions cease, the patient passes into a state resembling sleep, and when he rouses himself has no recollection of what has occurred. Patients generally feel a premonitory symptom known as an aura, usually described as being like a breath of cold air, or a "creepy" sensation accompanied by fear. Occasionally the aura is felt some hours before the attack, but often the patient has not time to lie down or to place himself out of danger. The average duration of a fit is two or three minutes, but they sometimes follow one another with no interval of consciousness, and this succession of fits is commonly described by the relatives as a single fit "lasting some hours."

Epilepsy is distinguished from hysteria by the single, blood-curdling shriek at the beginning, by the complete unconsciousness of the patient, and by his absolute recklessness as to all bodily injury, actual or possible. In feigned epilepsy the face is red instead of ghastly pale, the skin is hot, and the tongue is not bitten.

The treatment during a fit is to loosen the patient's cloth-

ing round the neck, lay him on the ground or on a large low couch, and place a cork or pad between his teeth to keep the tongue from injury. Attempts to control the convulsive movements must never be made, as if successful they might result in serious strain or lasting injury.

The general treatment required by epileptic patients is such as can rarely be obtained for them in the houses of the urban poor. They need kind, but firm management, and constant supervision; light, warm clothing, plain, nourishing food served with great regularity; separate beds, specially arranged and very little raised above the level of the floor; steady occupation; plenty of space, out-door exercise; fresh air night and day. How many of these conditions can be found in homes originally poor and still further impoverished by this heavy misfortune? One member of the household will over-indulge the patient, another be wantonly severe, while a third cannot be restrained from thwarting and teasing even at the imminent risk of bringing on a seizure. Training, food, clothes, bedding, all leave much to be desired. Suitable occupation is hard to provide, and amusement and change of scene become intensely difficult when school, Sunday school, church, chapel, gymnastics, the swimming bath, the Boys' Brigade, and "treats" of every description are inevitably cut off.

The nurse must do what she can to improve the general condition of the patients while they remain at home, but if practicable they should be removed to an epileptic hospital, or sent to live with relatives in the country where they can lead an outdoor life. It is not only on their own account that this complete change of environment is desirable. One of the saddest features of the disease is the mental and moral deterioration which invariably sets in when the fits are frequent and long continued. Every few months we are horror-struck by the report of some purposeless, inexplicable murder, generally of a young and helpless child, committed by a person well known to be an epileptic. Now this mania had not developed suddenly, but by degrees, plainly perceptible to a careful observer. I remember one good-looking, well-grown lad of fifteen, previously remarkable for what the poor call "tender-heartedness," who deliberately tried to stamp on the hands of his baby niece as she crawled about the floor. A few months later, although he belonged to a rigidly respectable family, he stole a pair of boots. The mother could not extort from him the name of the shop from which he had taken them, and surreptitiously dropped them in the street, overcome with shame and fear. Not long after he displayed tendencies which alarmed the

THE NURSES' CLINIC.—*Continued.*

parents still more, and they finally consented to send him to a Home where they paid 5s. a week towards his maintenance. They only fully realised the risk that they and their neighbours had been running when told that he was the worst and most hopeless case out of 400.

For the poor lad's personal benefit little or nothing could be done: he had been kept cooped up in a "block" for five years, scarcely ever going for a walk, and his general health was completely undermined. The nurse must do her best to persuade parents to part with the sufferer while the disease is still in a hopeful stage, pointing out to them that a sedentary life is deadly, and that the mental distress and humiliation that so much adds to the afflicted lad's sufferings will be greatly reduced when he finds that he is one of many, some better, some worse, and no longer a person to

be stared at, or to feel that he is enduring exceptional hardships and restraint.

Cold and tepid baths may be of use, also stimulants in moderation. The teeth should be attended to, and—especially in young children—worms may be a source of irritation, or circumcision may be desirable.

The first attacks of epilepsy may be so slight as almost to escape notice: the sufferer looks very pale, suddenly leaves off whatever he is doing, but resumes his work or conversation a few seconds later only conscious of having experienced a slight feeling of giddiness.

In what is known as Jacksonian epilepsy the patient does not lose consciousness, and the convulsions are confined to a single part of the body. This form results from tumour, or injuries to the skull, and operation may result in complete recovery.

Incidents in a Nurse's Life.

A STRANGE STIPULATION.

I WAS attached to a private nursing institution in Scotland, situated in a sunny street in a busy town. The nurses who were in from cases could go out for a walk or do as they liked till sent for, as long as they remained in the house either during the forenoon or the afternoon.

"Nurse, you are wanted in the business-room," said a bright-looking nurse, putting her head in at the nurses' sitting-room door, about 3 P.M.

"Oh, dear!" I exclaimed, feeling the usual flutter at heart which a nurse always feels when she is to be sent she knows not where. "You're booked!" exclaimed the others, who were in the sitting-room busy with their work or books, knowing full well what the signal meant.

"Well, good-bye, girls, and good cases to you," I said, gathering up my work and running downstairs to matron's business-room.

Matron was to my mind an ideal woman, kind, gentle, and considerate, and taking a personal interest in each of her 150 nurses.

After I had knocked timidly at the door I found her in company with another lady, whom I recognised as a lady doctor. "This is Nurse M., Doctor," said matron in her gentle way, "and surely her eyes are blue enough!" and they both looked at me and laughed. "You are puzzled, I expect, as to what we are laughing at, nurse," said matron; "but Doctor requires a nurse with blue eyes, and as yours are very blue, in conjunction with your other qualifications, I thought you might suit. Whatever will people want next? I have been asked for old nurses, young nurses, fair nurses, and dark nurses, tall nurses, short nurses, etc., but this is the very first time I have been asked for a blue-eyed nurse. As far as eyes are concerned yours ought to do, so I will leave you to talk over the case with Doctor."

"Well, nurse," said the doctor, "there is not much real nursing at the case, and it is only for a few days I shall want you, to give an old lady a rest. She has tired herself out, attending to her husband who is blind, and they both have had bad colds, so I want her to stay in bed for a few days, and you can give a little attention to both of them. They are eccentric people, but very kind if you use a little tact with them. See that they take their meals, and you won't need to stay up all night. Go to your bed and get a good sleep if they keep you; for they were unwilling to have

a nurse at all, but I insisted, and they can well afford it. I will call in the morning."

I got my box on to the top of a cab, and was off in a short time. We were often sent long journeys, but this was a town case, so the cab took me all the way. It was raining hard, and just as we were crossing a busy thoroughfare the horse slipped and fell right across the car lines. A crowd gathered in a minute, and I jumped out, one elderly lady remarking, "Dear me, nurse, how white you are." Indeed, I felt rather white, though I was vexed at showing my fears in my face, but I calmly rejoined, "Perhaps you would have been white, too, if you had been inside that cab." The horse by this time was helped up and once more into harness, so I got in again, and was soon landed at my patients' address. As the doctor had said, there was not much nursing to be done. Both husband and wife were queer and needed a lot of humouring and tact, but the old lady turned out kindness itself and was quite devoted to her blind old husband, who was also very good to me. I did what I could for them and for the household in general, and when I got to know them better I asked the reason of their wanting a blue-eyed nurse. I found that they were once very much deceived by a dark-eyed person and lost a large sum of money through him, and now not only trained nurses, but servants, clerks, and doctors—in fact, anyone who had any connection with them, was bound to have blue eyes, or they would not employ them. I returned to the home at the end of three very happy weeks, wearing a feather in my cap, for they had promised that if ever they were feeling ill they would have a trained nurse straight away—only, of course, she would need to have blue eyes.

To Nurses.

We invite contributions from any of our readers, and shall be glad to pay for "Notes on News from the Nursing World," "Incidents in a Nurse's Life," or for articles describing nursing experiences at home or abroad dealing with any nursing question from an original point of view, according to length. The minimum payment is 5s. Contributions on topical subjects are specially welcome. Notices of appointments, letters, entertainments, presentations, and deaths are not paid for, but we are always glad to receive them. All rejected manuscripts are returned in due course, and all payments for manuscripts used are made as early as possible after the beginning of each quarter.

Illustrations of the Life of a Modern Nurse.

OFF DUTY AT GUY'S HOSPITAL.



IN ONE OF THE RECREATION ROOMS AT THE RAPHAEL NURSES' HOME, LONDON.

A Severe Case of Rheumatic Fever.

EXAMINATION QUESTIONS FOR NURSES.

THE question was as follows: "What treatment should you apply (from a strictly nursing point of view only) to a severe case of rheumatic fever? N.B.—The answer must not touch upon drugs or anything to do with the medical man's province, but deal with the subjects of bed-making, washing, and dieting, if the latter is permitted by the doctor.

FIRST PRIZE.

The patient should wear flannel night attire, and must sleep between blankets. A twill pillow-case should be used in preference to a linen one; the same for the sheet, which may be placed over the blankets and turned in two or three inches at the top to prevent the rough surface coming in contact with patient's face.

Two or three blankets are generally sufficient, as many patients cannot bear the weight of much clothing. The bed should be carefully screened from draughts, and the temperature of the room kept at about 60° F.

The patient's joints should be swathed in cotton-wool and lightly bandaged, flannel bandages being used for preference.

The night-clothes should be changed at least once a day, as there is profuse sweating; have the clean one warmed and ready at hand, and change as quickly and gently as possible.

Do not expose the patient more than necessary when washing him. Each limb should be washed separately, and bandaged up again before the next is commenced. Have everything at hand, and plenty of warm towels, fresh wool, and bandages ready. It is advisable to keep two sets of bandages going, so as to avoid stopping to roll up those just removed for immediate use again. Be very careful in moving the patient, so as not to cause more pain than can be helped. Warm the bed-pan previous to giving it to the patient, or else cover round with flannel to prevent giving a sudden chill. Take patient's temperature every four hours, unless ordered otherwise. If the diet is left to the nurse's discretion, give fever diet—milk and light farinaceous food. Should all drinks be ordered warm, take the chill off the medicine by placing the glass in hot water; and then, after pouring in medicine, replace the glass in hot water for a minute.

Look out for, and report at once, any symptoms of heart complications, such as pericarditis, which may be suspected by vomiting, palpitations, and inability to lie down.

Do not allow the patient to make any sudden movement or exert himself in any way, and keep him very quiet. During convalescence continue to keep patient from over-exertion, and guard against draughts and sudden changes of temperature.

The patient must continue to wear woollen garments next the skin for a considerable time; in fact, he ought always to wear them.—ROSEMARY.

SECOND PRIZE.

Put the patient between blankets in a well-ventilated room at an even temperature and free from draughts. Appetite may be enticed and strength maintained by giving small and frequent feeds of milk, milk puddings, thin mutton broth, etc. After the severity, foods rich in vegetable matter must be given, and no red meat without orders. Chicken and fish, perhaps, will be the first allowed, as they are less rich in animal matter. Barley-water flavoured with lemon, lemon juice, soda and milk, may be given to drink. A four-hourly chart must be kept. It is best to have four thin blankets for use, and a liberal supply of night attire. When one lot gets wet from the profuse sweating another lot must be ready dried and warmed to put on. Sponging the patient must be done very carefully under the blanket with warm water unless otherwise ordered; it must be done in sections, and any part that is too painful must be done as far as possible without moving, taking special care about the armpits, groins, and any parts where the skin touches. There is a very strong, sour smell from the sweating. A few drops of eau de Cologne added to the water will be refreshing and eliminate the smell. The pain in the joints is often very severe: they may be done up in cotton-wool and bandaged and rested (if ease can be obtained) on a pillow

or a rubber hot-water bottle. A mackintosh must be placed under the bottom blanket. He must not be allowed to get out of bed, or even sit up, as the complications must be borne in mind. The throat may be gargled with a little weak solution of Condy's fluid, and the tongue and lips swabbed with a solution of boracic lotion. The bowels must be moved at least once a day. Epistaxis is often present in rheumatic fever. Should it not stop with the usual methods of treatment, the doctor must be sent for, as it often requires plugging. The bed-clothing must be light and warm, and a cradle used to prevent the clothing touching the painful joints. Everything possible must be done to prevent chills and shock, as either of these may have a fatal ending.—LANOITAN.

GOOD ANSWERS THIS MONTH.

The papers sent in this time are much in advance of previous efforts, and, judging by the number sent in, the question must have been a popular one. "Rosemary" and "Lanoitan" are the successful candidates. Their papers are exceedingly good, but so are those of many other competitors; they both, however, notice small points which if attended to conduce to the sufferer's comfort. "Rosemary" speaks of placing a cotton sheet outside so that the rough blanket may not worry the patient's face, and mentions the common-sense fact that, having two sets of bandages, will obviate delay and consequent suffering. She also is practical about warming drinking vessels, which is sometimes ordered by doctors. "Lanoitan" has very good ideas about dieting, and he has a remedy for the distressing smell that comes from such patients, and draws attention to the care required in washing where two surfaces touch. Neither prize-winner speaks as they should do of the personal garment being slit up the back and the sleeves, the latter being fastened with tapes; nor do they emphasise the washing process sufficiently. It needs to be much more than sponging with "warm" water. What is needed is a thorough wash with plenty of soap and hot water. If the patient can bear it, this should be done twice a day; the soap, being alkaline, has a very beneficial effect on the sour smell.

HONOURABLE MENTIONS.

This is gained by "Vallis," "Miramie," "D. C. E.," "Shepperton," "Elsa," and "Ripona." "Vallis's" paper is very good, and her ideas on dieting are superior to those of all the other competitors.

QUESTION FOR JANUARY.

If ordered to strap a leg for the cure of an ulcer, how should you proceed? Describe your preparations, mode of procedure, and, finally, in what manner should you remove the strapping when necessary. This is a simple question; but beware! there are pitfalls for the unwary and the conceited!

THE EXAMINER.

RULES.

The competition is open to all. Answers must not exceed 500 words, and must be written on one side of the paper only, without divisions, head lines, or marginal notes. The pseudonym, as well as the proper name and address, must be written on the same paper, and not on a separate sheet. Papers may be sent in for 15 days only from the day of the publication of the question. All illustrations strictly prohibited. Failure to comply with these rules will disqualify the candidate for competition. Prizes will be awarded for the best two answers. Papers to be sent to "The Editor," with "Examination" written on the left-hand corner of the envelope.

In addition to two prizes honourable mention cards will be awarded to those who have sent in exceptionally good papers.

N.B.—The decision of the Examiner is final, and no correspondence on the subject can be entertained.

Any competitor having gained three prizes within the current year shall be disqualified from taking another until 12 months shall have expired since the first prize was gained.

The Babies of Wakefield.

A VERY interesting and important contribution to health literature is Miss Marguerite Boileau's report of her three years' work as health visitor under the auspices of the Wakefield and District Sanitary Aid Association. Miss Boileau seems to have been allowed very much of a free hand in the work to which she should devote herself, and, after having given six months to the completion of some statistics of working-class homes prepared by her predecessor, she came to the conclusion that the best thing to which she could devote her attention was the welfare of infants. Like other observers, she had noted that the great decrease in the national death-rate during the last forty years did not seem to have affected that of infants under one year of age. Indeed, the highest proportion of infant deaths recorded in the statistics of the last century was in 1899, when it reached the alarming figure of 163 deaths for every 1,000 births. Some people are inclined to view a high infantile death-rate with indifference, if not with complacency, arguing that the children who die are weaklings, and that it is to the advantage of the race as a whole that these sickly ones should not cumber the ground. But Miss Boileau has two arguments against this convenient theory. "Medical opinion," she says, "gives 8 to 9 per cent. as the average proportion of babies born weakly; an infant death-rate of 80 or 90 is inevitable, but anything over 100 is preventable, and ought to be prevented. The surplus is entirely due to faults in tending and surroundings." As the rate of infantile mortality in Wakefield during the years 1893-1902 averaged 173 per 1,000, this estimate—which is not a fancy one, but founded on reliable facts and statistics—forms in itself a serious indictment of Wakefield methods and Wakefield mothers.

But even more important from the national point of view is the case of those who survive. To quote Miss Boileau again: "The same conditions that weed out the weakly babies ruin the physique of the strong." If, for example, a mother is obliged to keep the baby in a damp cellar-kitchen while she does her daily work, bronchitis sets in, then pneumonia; if delicate, the baby dies—is "weeded out"; if strong it survives, but it will be with an enfeebled breathing apparatus, which in later years will convert an attack of whooping-cough, measles, or influenza into a dangerous illness, and make ready another victim for consumption. Therefore, the most important part of a health-visitor's work will not show in immediate statistics. However satisfactory in itself a lowered rate of infantile mortality may be, one should regard it chiefly as indicating that, while the weakly are preserved in life, the strong are preserved in health.

Miss Boileau does not agree with all the authorities regarding the causes of infant mortality. Two of the causes most commonly mentioned are the employment of married women in the factories and the decline of breast-feeding. As has been seen, Wakefield has a high infant death-rate. Yet Miss Boileau says that in Wakefield mothers of young babies do not go to work in the mills. "I have only had fifteen cases in over 1,000 in which the mother has worked in a mill, and only one of these babies was left while under three months old." Again: "To give the actual figures, I have found 6 per cent. of the mothers at work; over a quarter of these were unmarried women; in the remaining cases the reason was that the husband was receiving a very low wage, out of work, delicate, or a drunkard." Moreover, the work which these women do is not mill work, but washing or charring—that is to say, it is irregular, and does not involve such long hours away from home as factory labour, and Miss Boileau does not

think that it is a factor in the infant mortality in Wakefield.

With regard to breast-feeding, Miss Boileau found that 56 per cent. of the infants that came under her notice had the breast only, while 12 per cent. had both breast and bottle, and 7 per cent. were weaned before the ninth month. As a matter of fact women of the working class consider breast-feeding much less troublesome than hand-rearing, and as they have no one to whom to hand over the charge of the child, the latter course has no advantages for them. Only 14 per cent. of the mothers were totally unable to suckle their children, and Miss Boileau thinks that a considerable proportion even of these would have been able to rear their children at the breast if they themselves had had sufficient nourishment and proper rest after the birth of the child. Miss Boileau gives full credit to the work done by crèches and milk depôts, but she points out that hitherto attention has been given exclusively to agencies for the betterment of the bottle-fed baby, and adds that there is as much to do for the breast-fed infant. "I have more often," she says, "to exert all my powers of persuasion to induce a mother with ample breast-milk to cease ruining her child's digestion by cramming it with bread-sops than I have to get a tubeless bottle into use in place of the murderous long tube."

The inference is that the cause of excessive infant mortality, at least in Wakefield—and who shall say that that town is exceptional?—is the ignorance of mothers of the commonest laws of health. Miss Boileau found that indeed there were worse people than the mothers in this respect—namely, the grandmothers, who were equally ignorant and far more obstinate. Improper feeding is a common cause of sickness and death. Miss Boileau mentions tea, gruel, bread, soup, arrowroot biscuits, rhubarb pie and pancakes, as among the things given to young children within her knowledge. In one case an eighteen-year-old mother had been advised "to give the child a taste of everything she took, and then her milk would never disagree with the baby." Obeying this dictum, she gave a four-days-old baby some tomato! Even when the child gets nothing but breast-milk, it does not follow that it is being wisely fed. It is a common practice of mothers to feed the child whenever it cries. Its cries may be the result of over-feeding, or of discomfort in clothing, or cold, or any other cause, but the remedy is always the same—another meal. This is the fault of quite well-meaning mothers. One woman told Miss Boileau that she meant to begin to give her baby solid food, because he was so cross all morning, that she thought that the breast-milk did not satisfy him. This was a model dame, so "house-proud" that she cleaned up her house before she attended to the baby, who was sometimes not washed until after dinner. When the child cried it never struck the mother that he wanted clean clothes and a bath—her only idea was to stodge him up with starchy food. In such instances the kindly interest and advice of a tactful lady health visitor is invaluable. Miss Boileau found that the regular weighing of the baby acted as an admirable object-lesson not only to the mother, but to the father, and she found this "the best peg on which to hang instruction as to the mother's need for food, rest and care when suckling her baby."

On this point of the mother's needs Miss Boileau has wise words to utter. Very seldom have any savings been put by for the inevitable expenses that the baby brings with it, and only after it is born does the mother begin to economise—generally beginning with her own food, says Miss Boileau, who adds:—"Privation and overwork at this time are the commonest causes of the loss of the breast milk." To meet these cases a provident scheme is being tried, which has already had good results. This is a kind of charity of which we have too little in England, but it may be hoped that the attention which is at present being given to the question of the birth-rate may arouse people to the fact that a healthy and well-nourished mother is a necessary factor if we are to have healthy and well-nourished children.

Nursing at an Indian Hill School.

HERE on the Himalayas, with exquisite mountain scenery and the eternal snows ever in sight, there is a school for English boys of the better class, with a Cambridge man who has taken Holy Orders as its Rector, and an English university staff, also graduates of either Oxford or Cambridge. The building is a very imposing one, though internally lacking in much that Europeans are accustomed to. We have also a church, a hospital with isolation ward attached, a gymnasium, a large library, and even a tuck-shop, in the compound.

We are two miles away from the station, and, standing on a great height, are supposed to escape many of the epidemics and minor illnesses to which the station inhabitants are subject.

Recently there has been a tremendous smallpox scare, several Europeans having died. Of course, it originated in the native quarter, and two early fatal cases of Europeans were those of missionaries who lived in or near that locality. Natives were vaccinated by the thousand, but the lymph first used was bad—i.e. ineffectual. For some time before the end of term our pupils were forbidden to go beyond the school boundaries.

The school being principally for the benefit of Indian-born children whose homes are in the torrid plains, there is naturally a good deal of sickness to combat; indeed, many of them are sent here more for health than for anything else. They vary in numbers from 100 to 120. We have a complete term of nine months, commencing in March and finishing late in November, the winter months being considered too cold for these children. The school is then closed, and we all welcome the vacation, as during the term it is one long grind for the staff. I have charge of the hospital attached to the school. These country-born boys are a wearying, wearing crew, not having the stamina of those born in Europe, always accustomed to being waited on, and noisy and mischievous beyond words.

To start with, when being brought up in the train under the charge of the masters, one boy very nearly lost an eye owing to being struck by a stone thrown by some Babus—natives of Bengal—in return for a similar attention on the boy's part. I opened my new packets of dressings and lotions for him on the very day of our arrival. All the boys were subsequently examined by the civil surgeon for any latent disease.

Many coming from warmer places immediately developed coughs and colds, which the surgeon always treated with gargles and throat-painting—troublesome, but effectual. Then one was always on the watch for malaria, which many of the youngsters had in their systems. I several times had a persistent temperature of 104 degrees to cope with. I used to give stock fever mixture of salicylate with saline purge, or, what was usually a better febrifuge, phenacetin with brandy—of course by doctor's orders. Then when fever was normal, or nearly so, quinine was given for a week, followed by a tonic of citrate of quinine and iron.

We were not troubled much with what is known as hill diarrhoea, but had a few cases, which promptly yielded to castor-oil emulsion.

One dear little lad developed acute appendicitis, supposed to be due to eating a potato-puff made with pastry. But there were others who said that, in fighting with another boy, he received a kick in the abdomen. He was removed to the Sanatorium and operated on by our very clever civil surgeon, but succumbed in twenty-four hours.

Later, a boy swallowed a key of no inconsiderable dimensions, being an ordinary-sized cupboard key. In spite of prompt treatment it was never again heard of.

Another, quite a small child barely nine years old, sampled an eight-anna piece (the size of an English shilling). This was subsequently presented to him, and he was delighted at regaining his week's pocket-money.

Another pupil put a piece of lead pencil into his eye, and yet another, one of the older boys, nearly lost the sight of one eye while fencing in the gymnasium owing to the slipping of a foil.

Accidents during hockey and cricket were frequent, as the school often played teams of Tommies, who were very rough for such young lads. In all these accidents there was much more tendency to fainting and collapse than among adult patients. Neither was there any doctor to be easily got at, as he only paid a short visit once a week.

Then there was a case of measles, quickly isolated and attended to by me. We lived in constant dread of a repetition for a little time, but no one else fell a victim. I had also one case of whooping-cough with bronchitis. We did not like to send the boy home, as his people were poor, and there were several brothers and sisters at home. We had also acute rheumatism more than once—these and fever occurring mostly during the rainy season. We have the heaviest rainfall of all India, commencing in early June and continuing till late September. We were considered to have got off comparatively lightly this year; but to a newcomer like myself the continual rain seemed dreadful.

Then, when we thought we were getting nicely over all our troubles, we had an outbreak of dhobies (Washerman's) itch, only known to happy India. There was a good deal of it in the station at the time. At the school it started with ringworm, said to be one and the same thing. Not the usual home kind, but on the body. They were isolated and well in a week with chrysophanic acid. Then there appeared cases with sores; we had them in hospital, and treated them with sulphur ointment one in four (1 in 4), and got them well. But as fast as you could fumigate and get rid of one batch in would come another, till at last we had the native doctor up to examine all. The native servants, with their wives and families, and the civil surgeon overhauled all the boys. There were twenty-seven cases in all, some with ever such slight spots being looked upon as suspects. They were all put into one dormitory, and only allowed to go to school wearing gloves and long washing-sleeves up their arms, and were smeared twice daily with sulphur ointment.

The gloves were also used for playing hockey and cricket, so naturally they were quickly filthy and in holes, also often lost and had to be replaced. There were two accidents and two ringworm cases admitted into hospital the last week of term. At last, however, they all finally departed in great glee under the escort of two of the masters, many with from three to five days' railway journey before them. The distances are so great in India, and some of the boys have to be shipped off to the Straits or Burmah. On the eve of departure they smashed thirty odd windows before leaving.

I do my own dispensing, which is considerable, as the local chemist is too dear, and one has to provide for the native servants and employés, as well as the household. So with no assistant it will be seen that my post is no sinecure. I have also been busy lately learning Hindustani under a native tutor. It is a disagreeable necessity and an expensive one; but I am glad I undertook the language now, as it saves me a lot of irritation and bad temper, English-speaking servants being rare in India.

Just now the mountains are at their loveliest. At sunset rosy lights are thrown over the distant snows. During the daytime it is fairly warm in the sun, but in the mornings there is a slight frost and it is cold enough for fires in the evening.

An English Nurse Assaulted on a Foreign Railway.

On Saturday evening an English lady travelling in the express from Turin to Paris was murderously attacked and robbed. On the arrival of the train at the last Italian station before the frontier she was found in a first-class compartment half insensible, and was afterwards conveyed to Chambery Hospital. Her condition being very serious, trepanning was immediately performed, and when the operation was over she was able to make a statement through an interpreter. She is reported to have said that she was returning from Genoa on her way to Paris, where Madame Lechet expected her. At Turin a young man, fair-haired, with a moustache, and very stylishly dressed, entered her compartment. He settled down comfortably, and seemed to go to sleep. The nurse did the same, and she was in a deep sleep, when she received a violent blow on the head. She opened her eyes and saw the young man before her with a hammer in his hand. Before she had time to utter a cry she received a second blow on the head, and fainted. When she recovered she found that she had been robbed, her jewels and her pocket-book containing money having disappeared.

Subsequently it was ascertained that the unfortunate lady was Miss Fruzenah Low, a trained English nurse, residing in London, and that the Madame Lechet mentioned was a personal friend, who had made her acquaintance two years ago, when Miss Low was on the staff at a military hospital in England. Further inquiries have elicited the fact that Miss Low is a member of the Nurses' Co-operation, and, as Mrs. Lucas, the matron of that institution, informed our representative, was at St. Thomas's Hospital some time ago, working in the same ward as herself. She was trained at Charing Cross Hospital. It was a little more than ten years ago when Miss Low first joined the Nurses' Co-operation, and going to South Africa when the war broke out, remained there for two years, her services being much appreciated by the soldiers. She then returned to London and resumed work as a private nurse. In the middle of December last she left New Cavendish Street to take a lady patient to Bordighera, and on January 7 this year she wrote to Mrs. Lucas that she was returning, but asked for a holiday. The request was complied with, and she proposed to spend it with Madame Lechet in Paris. Mrs. Lucas thinks that the circumstance that she was travelling first-class may have been due to her patient, as the Co-operation only allow their nurses second-class. As soon as her identity was published in the newspapers on Tuesday telegrams kept coming in from former patients and friends inquiring about her, and the nurses of the Co-operation are exceedingly distressed. Mrs. Lucas, who states that she was one of the most capable nurses belonging to the Co-operation, despatched a nurse—one who had worked with Miss Low in South Africa—late on Monday evening to Chambery to take care of her and do all that is possible for her. The nurse telegraphs that on Tuesday Miss Low passed a good night.

Queen Victoria's Jubilee Institute for Nurses.

MISS JANET E. MUNDY has been appointed assistant superintendent, Gloucestershire County Nursing Association. Miss Agnes C. Angus has been transferred to Frizington from Sunderland, Miss C. M. N. Bell to Hertford from Woolton, Miss Edith M. Buller to Oxford from Rottingdean, Miss Mary T. Cunningham to Esclusham from Frizington, Miss Ellen L. Wells to Penzance from Gosport, and Miss Jane McEwen Hutchinson to Willington from Pateley Bridge. Miss E. Inston has been appointed to Crook, Miss Sarah E. Lebart to Woolton, and Miss Alice M. Goodman to Gosport.

The Royal National Pension Fund.

THE NEW BADGE FOR THE QUEEN'S OWN NURSES.

THE following illustration will enable our readers to realise how effective and really attractive the new badge is which her Majesty Queen Alexandra, the President of the Fund, has approved.



QUEEN ALEXANDRA'S NEW BADGE.

The price of each brooch as shown in the illustration is eleven shillings and sevenpence in gold and red enamel, not one shilling and sevenpence as erroneously stated last week, and one shilling and one penny in gilt and red enamel, postage included. The new brooches may be obtained from the secretary at the office, 28 Finsbury Pavement, E.C., envelopes being marked "Brooch." We may add that the brooch is to be worn habitually by policyholders of the Pension Fund, who are to reserve the armlet for use upon ceremonial and public occasions only.

Appointments.

BOROUGH OF BURSLEM INFECTIOUS DISEASES HOSPITAL.—Miss B. S. Ashman has been appointed charge nurse. She was trained at Crumpsall Infirmary, and has since been assistant nurse at the City Hospital, Grafton Street, Liverpool, and charge nurse at the Isolation Hospital, Menston-in-Wharfedale.

BRITISH HOSPITAL, PORT SAID.—Miss J. Davidson has been appointed charge nurse. She was trained at Crumpsall Infirmary, and has since been district nurse at Lumley, near Chester-le-Street. She holds the certificate of the Central Midwives Board.

CHIPPENHAM UNION INFIRMARY.—Miss M. C. Munro has been appointed superintendent nurse. She was trained at St. Olave's Infirmary and the East End Mothers' Home, Commercial Road, London. She has since been maternity nurse at St. Mary's (Islington) Workhouse. She has also done private nursing.

FLETCHER CONVALESCENT HOME, CROMER.—Miss Edith Adeline Noar has been appointed matron. She was trained at St. Bartholomew's Hospital, London, where she has since been night superintendent. She has also been assistant matron of St. Bartholomew's Convalescent Home at Swanley, Kent.

LIVERPOOL ROYAL INFIRMARY.—Miss Isabel Callaghan has been appointed assistant lady superintendent. She was trained at St. Bartholomew's Hospital, London, and has since been sister at the Royal Hospital for Sick Children, Edinburgh, and night superintendent at the Royal Hospital for Diseases of the Chest, City Road, London.

REDHILL COTTAGE HOSPITAL.—Miss Ada Stuart Daniels has been appointed staff nurse. She was trained at the Royal Free Hospital, London, where she has since been theatre nurse. She has also been charge nurse at the South-Western Fever Hospital, London, and has done private nursing for the Mildmay Institute.

SALFORD UNION INFIRMARY HOSPITAL, NEAR ECCLES.—Miss Mary Pickup has been appointed charge sister. She was trained at Prescott Union Infirmary.

Everybody's Opinion.

[Correspondence on all subjects is invited, but we cannot in any way be responsible for the opinions expressed by our correspondents. No communication can be entertained if the name and address of the correspondent are not given as a guarantee of good faith, but not necessarily for publication. All correspondents should write on one side of the paper only.]

THE ROYAL NATIONAL PENSION FUND FOR NURSES.

"E. M. G.," Stoke-on-Trent, writes: From time to time letters have appeared in THE HOSPITAL speaking of the benefits of the Pension Fund. May I too give my experience of it? I have been a member for nearly seven years. Shortly after I joined I became ill and received the sickness allowance for six weeks. Last June I had a serious illness, which left me very weak for a long time; although I am much better I am not yet strong enough to take up my work. During this time from the commencement until now I have been receiving sick pay from the fund. It has come regularly, and has been a great boon. Does not this speak for itself? Will you, through THE HOSPITAL, allow me to express my grateful appreciation to the committee and the secretary, Mr. Dick, for their most kind consideration? I look upon the Pension Fund as the greatest boon to a nurse, for not only is it a splendid investment for old age, but it means a great deal to be sure of receiving an allowance when one is incapacitated. I hope this letter may influence some nurses who think of joining, yet hesitate. I can only say it was the best thing I ever did when I joined the Pension Fund.

COTTAGE HOSPITALS AND STAFF NURSES.

"E. L." writes: Having had some experience as a staff nurse in cottage hospitals, I should like to say a few words in favour of these posts. Doubtless every nurse begins by entertaining and cherishing a desire to become a matron. This is necessarily the summit of her ambition, and perhaps it is just as well to aim high. Still, there are a few, more or less, humble souls amongst us, and by and by we may acknowledge, however reluctantly, that perhaps after all we are not equipped by Nature with, nor do we seem altogether able to acquire, the qualities which go to the making of a successful administrator of a large and important institution. When we have reached this stage our thoughts turn to fever, special and cottage hospitals, and to convalescent homes. Although at the present time the recognised method of attaining to one of these smaller prizes of the profession seems to be by the route of "sister," still, the post of staff nurse supplies valuable experience and preparation for these nurse-matronships, and I think that every nurse must know of instances where staff nurses have been successful in obtaining these appointments, probably in many cases because of their knowledge of cottage hospital work. Indeed, there can be no better training for the matron of a small institution than that obtainable by the senior staff nurse in a cottage hospital. A three years' certificate is a *sine qua non*, and the work though limited in quantity is good in quality, surgical cases preponderating; and it is by no means uncommon for critical operations of a rare nature to be undertaken in quite small hospitals. As there is usually no house surgeon the matron reigns supreme, and all responsibility devolves on her, but if the nurse proves herself capable and trustworthy and is a cheerful and willing worker she will find that the matron will confer with her on many points and will give her opinions due consideration, treating her in all respects as a valued colleague. She will, in fact, be the matron's understudy, taking her place during her absence and probably doing matron's duty in case of sickness or holiday. In this way she will gain confidence in herself and experience in housekeeping and in household management, which experience will stand her in good stead when she in her turn has charge of a hospital, and it will also count in her favour when applying for a post. The most attractive feature of cottage hospital work, however, lies in the more homelike character of the conditions of life. The rules so necessary to the effective working of a large institution are out of place here, or are so greatly modified as to be unrecognisable. After the rush

of a large hospital a nurse once more finds herself, and is encouraged to be herself. In place of being merely cases the patients are individuals, with idiosyncrasies and individual hopes and fears, and the nurse, if she is a true woman, enters into their interests and sympathises with them in their troubles and joys. Among the minor attractions may be placed the fact that the small hospitals are very often beautifully situated either in or near to lovely country; and although it may be a weakness still there are persons who require in their life and work the help which Nature gives to those who love her. Just as some can scarcely exist away from the noise of the Strand, so others are drawn to a country life. Some of the best women and best nurses I have known who, if compelled to live and work in a large town, would break down altogether, are doing good and valuable work in cottage hospitals.

AN INCIDENT IN A POOR-LAW INFIRMARY.

"RESPONSIBLE" writes: After reading "an incident in a poor-law infirmary" in your issue of January 5, I should like to give you a slight idea of the way in which the night duty is arranged in a poor-law infirmary in Warwickshire. The building consists of two floors; there are two wards containing fourteen beds in each, with a small ward opening out of the large one on the ground floor. The top floor is on a similar plan. There are at the present time sixty-two patients; of these seven on the female side are mental cases. There is one nurse on duty from 8 p.m. till 8 a.m. She is held responsible for all patients in the building, and it is only in the event of a patient being in a dying condition that any extra help is given; then it is only an inmate from the workhouse who is sent over to sit with the patient, who, of course, being quite ignorant of sick nursing, is of not much help to the nurse. A few nights ago a female lunatic got out of the ward, and I was only just in time to prevent her from entering the male ward; she became very violent on being stopped, and, though ninety-one years of age, I had great difficulty in getting her even as far as the duty room, which is half way between the two wards on the top floor, and then was obliged to call up a patient and send her for the superintendent nurse. The next night when I came on duty I asked for a woman to sit with the patient and was refused by the superintendent nurse. I then appealed to the Master, who refused to have anything to do with the matter, saying that the superintendent nurse was head of the infirmary and responsible for all that happened in it. The following night whilst I was at the other end of the building downstairs the patient got out of bed and made up the ward fire and poked out a large piece of live coal, and was looking round the ward for a piece of paper to put it on with again. Fortunately, before she could find any, one of the other patients awoke and got her back into bed, and thus averted what might have been a very serious catastrophe. I may add that there are two assistant nurses here, and they take night duty every alternate month. I brought this case before the Board of Guardians at their usual meeting, with other matters of equal importance relating to the nursing here, but no notice whatever was taken of my complaint. I have therefore sent in my resignation after being here only six months.

Death in our Ranks.

WE regret to hear of the death on Friday last, after a short illness, of Miss May McKenna, staff nurse in Queen Alexandra's Imperial Military Nursing Service. The interment took place on Monday at Kensal Green Cemetery.

Wants and Workers.

MISS ALICE MAUD, of Hollow Dene, Wellwood, Torquay, writes: I have a lot of nursing and medical books to dispose of, and a new cloak, a wallet, and hypodermic syringe. Do you know of any poor nurse who would like to have them? There are about a dozen books—Taylor's "Medicine," Walsham's "Surgery," Huxley's "Physiology," one or two on midwifery, etc., and I do not need them any longer, so should be glad to give them away to some poor nurse. I cannot offer to pay carriage.

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Notes and Queries.

REGULATIONS.

The Editor is always willing to answer in this column, without any fee, all reasonable questions, as soon as possible. But the following rules must be carefully observed.

1. Every communication must be accompanied by the name and address of the writer.
2. The question must always bear upon nursing, directly or indirectly.

If an answer is required by letter a fee of half-a-crown must be enclosed with the note containing the inquiry.

Dispensary.

(173) I have the Apothecaries' Hall certificate for dispensing, and I desire to secure a temporary or permanent post. I have advertised in the medical papers, but they are so very expensive. Would it be any use advertising in THE HOSPITAL? I have held several temporary posts.—*Salisbury.*

As you have had several posts, could not your employers assist you? There is not a very large demand for dispensers. THE HOSPITAL is regarded as a first-class medium for such vacancies as yours, but we cannot advise you on this point.

Qualifications of a Training School.

(174) Can you give me information with regard to the qualifications of a certain hospital as a training school for nurses?—*Argon.*

In seeking a good training school for nurses it is of the highest importance to ascertain whether the nurses receive regular instruction, and ultimately a three-years' certificate. This information can be obtained by writing to the matron of any hospital selected. The number of beds should not be less than 100. The hospital you mention contains only 66.

Workhouse Nursing.

(175) I have had three months' training at a nurses' home and have worked for 10 years for a Cottage Nursing Association. Would this be sufficient experience for a workhouse nurse?—*A Constant Reader.*

Unless you became a probationer and started afresh, you would not be received at the larger workhouse infirmaries; but at some of the smaller ones you might possibly find work at a small salary.

Home of Rest for Nurses.

(176) I have stayed at the house of a nurse in Hastings, and I have been so comfortable I should like to recommend this nurses' establishment to others. She would be glad of a blind patient.—*Private Nurse.*

We regret we cannot recommend private establishments, but why does not the nurse advertise? Many nurses might be glad to hear of a comfortable home by the sea.

Lending Library.

(177) Can you give me the address of a free lending library in Somerset?—*Taunton.*

There is a lending library especially for nurses in Somersetshire. Do you refer to this? If so, write to Miss F. Joseph, Woodlands, Holford Bridgwater.

District Nursing.

(178) Can you tell me if I can obtain a post as district nurse, not holding the Central Midwives Board certificate? I have just finished my training.—*Leamington.*

As you write from a general hospital, are we to understand that you have just completed your training as a nurse, and not as a district nurse? If so, you will still have to train for district work. It would be best for you to write to the General Superintendent, Queen Victoria Jubilee Institute, 120 Victoria Street, S.W. If you have trained, you must advertise, or you might apply to some of the district nurses' associations, of which there is a list in "How to Become a Nurse" to be had, price 2s. 4d. post free, from The Scientific Press, 28 and 29 Southampton Street, Strand, London, W.C.

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For Reading to the Sick.

"THY WILL BE DONE."

We see not, know not; all our way
Is night—with Thee alone is day:
From out the torrent's troubled drift,
Above the storm our prayers we lift,
Thy will be done!

We take with solemn thankfulness
Our burden up, nor ask it less,
And count it joy that even we
May suffer, serve, or wait for Thee,
Whose will be done!

J. G. Whittier.

Oh, I would speak this day to any who are in sorrow, or trouble, or affliction, and say, If your Master "learned obedience," and was "made perfect through suffering," will you refuse to share His burden, if you may afterwards win His crown? Will you put away from you by murmurings and discontent the rich blessing your suffering came to offer you? How well does our Church speak to all her suffering members in the office of the Visitation of the Sick, saying, "There should be no greater comfort to Christian men than to be made like unto Christ by suffering patiently adversities, troubles, and sicknesses. For He Himself went not up to joy, but first He suffered pain; He entered not into His glory before He was crucified. So truly our way to eternal joy is to suffer here with Christ, that we may rise again from death, and dwell with Him in everlasting life." . . . —*Bishop Walsham How.*

He Who suffered in our nature knows what our suffering is. Although He may seem to leave us for awhile in difficulty, nevertheless He takes no delight in such distress. Quickly does He welcome the gift of love which the heart in its anguish offers to Him. If we fail to love Him, and doubt His love, He leaves us all alone; but if we show that sorrow does not make us shrink from Him, He will use the sorrow as the opportunity of showing His tender care for us.

Nothing binds the soul to Jesus so much as outward trouble, for this makes us experience His individual tenderness. We learn therein the lesson of the Cross, and we learn to praise Him for the sufferings which He Himself has borne on our behalf.—*R. M. Benson.*

We must not think we need only to be supported under our affliction. Those who are pressing forwards to a better country will not rest unless they are also sanctified by it; unless each successive wave that passes over them sweeps from their souls some of the dross of earth, and leaves some gift of Heaven in its room, so that the changes and chances of this mortal life shall be ever lifting them further from earth, and bearing ever nearer to the land of everlasting peace.—*Anon.*

Above the tempest wild I hear Him say—
"Beyond this darkness lies the perfect day;
In every path of thine I lead the way."

Anon.

The Hospital.

Nursing Section.

Contributions for this Section of "THE HOSPITAL," should be addressed to the EDITOR, "THE HOSPITAL,"
NURSING SECTION, 28 & 29 Southampton Street, Strand, London, W.C.

No. 1,063.—VOL. XLII.

SATURDAY, JANUARY 26, 1907.

Notes on News from the Nursing World.

RESIGNATIONS AT DARLINGTON HOSPITAL.

WE understand that Miss F. A. Hunt, lady superintendent of Darlington Hospital, has resigned, and that other members of the nursing staff are also relinquishing their posts. It is just over 20 years ago since Miss Hunt became matron of the institution which she is leaving in about a couple of months. She was trained at St. Thomas's Hospital, and afterwards was for a time matron and secretary of the Hospital for Women in Marylebone Road. When she went from London to Darlington she did not expect to remain there for more than a short period, but she found the work so congenial that she stayed on, and under her auspices servants' quarters, the porter's lodge, and the children's ward were added in succession. Quite recently the important extension embracing two wards containing 14 beds, two rooms for single patients, a large laundry, a mortuary, a new operating-room, a new sitting-room and other accommodation for the nurses, has been completed. Before these additions were made there was so much pressure with regard to space that nurses were occasionally obliged to sleep in the committee-room. Miss Hunt believes that nurses ought to acquire a knowledge of hospital construction, and during the creation of the extension she did her best to explain to the members of the staff the principles on which it was being built.

A MATRON ON MATERNITY TRAINING.

Those who are disposed to despise the calling of monthly nurses or to minimise the importance of proved capacity and sterling character in a trained midwife should read the remarks of the matron of the British Lying-in Hospital to our Commissioner in the report which appears on another page. Miss Knott expresses her conviction that no one ought to take up maternity work who does not possess an inherent love for small babies and is not able to maintain her interest in them. She also insists upon the necessity of possessing great patience with them and great sympathy for them. She shares the view that it is better for a nurse to take general training before midwifery training, instead of after, because a fully-trained nurse has more confidence in tackling the emergencies which frequently arise in midwifery cases than an inexperienced young woman. The great increase in the number of applications for midwifery training at the British Lying-in Hospital from fully-trained nurses is a hopeful sign of the times.

NURSING AT THE ITALIAN HOSPITAL.

THE Governors of the Italian Hospital, who held their annual meeting last week, affirm that the cost per occupied bed compares favourably with any other hospital in London. This is largely due to the self-denying labours of the small band of sisters who undertake the nursing. The sisters belong to the community of St. Paul, and, including the Sister Superior, are ten in number. Two are engaged in the pharmacy, one is in the linen-room, and one is practically housekeeper. There are in addition four nurses, three fully-trained and one half-trained; two of these perform night duty work, one sister—who has already been on duty during the day—staying up until 12 or 1 o'clock or all night if necessary. Besides the nursing staff, there are ward-maids and servants for the kitchen. The accommodation for the nurses is of a somewhat makeshift character; the two night nurses have a room outside the hospital, and there is a small room on the ground floor, which is used as a sitting-room. Although preference is given to Italians, as many as 6,000 British subjects made use of the hospital during last year. The wards are all airy, bright-looking rooms, kept absolutely speckless. There are several single bed wards, which are found very convenient for certain patients. A glance into the out-patients' hall and the pharmacy showed two sisters hard at work dispensing and a good array of patients waiting their turn.

SCANDALOUS NEGLECT AT A YORKSHIRE INFIRMARY.

A VERY alarming incident occurred the other day at Dewsbury Workhouse Infirmary. At the conclusion of an entertainment in the wards, the matron, Miss Payne, asked the Rev. Edwin Carr, who had been conducting it, to assist her in putting the strait-jacket on a patient who was obviously out of his mind. Father Carr complied, and while they were trying to put the jacket on, the man escaped, ran to his locker, drew a table-knife from the drawer, and attacked the priest. A struggle ensued, and the patient, still in possession of the knife, rushed from the ward, slammed the door behind him, struck at the porter with the knife, and getting outside the infirmary, was only captured with difficulty by a policeman. Mr. Carr, in commenting on the incident, impeaches the management of the infirmary, and avers that "cases of mental debility of every kind are treated in the ordinary wards, where the sick inmates are," also that "mental patients have been known to hide knives under their pillows

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and elsewhere." There are no male officials in the building, which is isolated and stands apart. An experienced administrator will realise the danger if the acute mania had seized the man when only the two night nurses, each on a separate floor, were on duty. Indeed, Mr. Carr states that "less than twelve months ago a man suddenly went mad in the night, pinned a night nurse by the throat in the corridor, and injured as well as terribly frightened her before her colleague came to her assistance." The Guardians had therefore knowledge of the danger, and they are consequently guilty of scandalous neglect in not affording proper protection to the nurses at Dewsbury Infirmary.

NURSING IN NEW ZEALAND TWENTY YEARS AGO

LAST week we mentioned the difficulties under which New Zealand nurses have to train, and congratulated the authorities of some of the leading hospitals on the results they have none the less been able to achieve. On another page to-day a contributor, who was in the Dunedin Hospital in 1886, gives a vivid account of her experience when she entered that institution as the first fully-trained nurse engaged in the wards. We fancy that the modern nurse would say that the work she had to get through was an impossibility. But the fact that she remained in the hospital for two years and not only nursed 22 patients from 6 A.M. to 6 P.M., but polished the brasses, scrubbed the ward kitchen, tables, and bath-room every day, and the whole ward once a week; cleaned her own fireplace after carrying up her logs from the basement to feed it, folded all the ward linen, and occasionally ironed it, certainly proves that she was equal to any demands upon her. In those days a female nurse never went into a male ward, and our contributor, who suggested that she had no objection to do so, was looked upon by the untrained matron as hardly respectable.

SLIGHTING THE SUPERINTENDENT NURSE.

A SUPERINTENDENT nurse of an important poor-law institution, writing to us to express her gratification at the plain speaking of our contributor "M.D." on workhouse nursing, gives a remarkable instance of the imperative need of reform in the existing system. She states that not only is she in total ignorance of the credentials of a nurse when she is appointed, but that she does not have an opportunity of even speaking to her "until she comes to commence her duties." Could anything be more ridiculous than this? Apart from the slight which is put upon the superintendent nurse, what can be said in defence of the policy of allowing nurses to be engaged without consulting the one person in the institution who is qualified to ascertain whether they are fit for the work?

FADDISM AT SAN FRANCISCO.

THE authorities of the City and County Hospital, San Francisco, lately made it a rule that the nurses must habitually wear white shoes and stockings. The innovation caused much irritation among the staff, and a remonstrance with many signatures was drawn up and presented to the

principal of the training school. For a time the new rule was disobeyed. This resulted in an order on the part of the Board of Health—the governing body—that any nurse appearing in black shoes and stockings would not receive a pass to leave the grounds, and all but two of the staff gave in. They, it is stated, still wear black shoes and stockings, and go without the pass. Resistance to rules cannot be countenanced, but it reads rather as if there were faddists in power at the San Francisco Hospital.

MILK-AND-WATER REFORMS AT HOPE HOSPITAL.

ON Thursday last week the Infirmary Committee of the Salford Board of Guardians met in order to discuss the report of the Inspector of the Local Government Board on the administration of Hope Hospital, to which we alluded last week. It was determined to call the attention of the steward and the matron to the matters complained of in the report, and "to warn them that if a similar state of things occurred again they would be dismissed forthwith." The committee also resolved to recommend the appointment of a senior resident medical officer "with modified duties" as medical superintendent, of a night porter, and a bath attendant. One of the committee, a lady, urged the importance of a revision of the dietary scale, and in particular the substitution of butter for margarine for the sick inmates, but a decision on this point was deferred to a future meeting. The committee evidently do not recognise the gravity of the situation, and we doubt if anything short of drastic action on the part of the Local Government Board will induce the Salford Guardians to realise and discharge their duty.

INSUBORDINATION AT WOLVERHAMPTON.

THE Wolverhampton Guardians have dismissed a probationer for a serious breach of the regulations. Having first left a ward of sick people without anyone in charge, she subsequently, on being remonstrated with, obtained a cab and quitted the institution. The chairman, in criticising her conduct at the meeting of the Board last week, insisted that it was requisite, in the interests of discipline, to dismiss her, instead of accepting the resignation which she had sent in, and also to deprive her of the amount of salary due. We think that the Guardians were fully justified in assenting to this proposal. That the rules at Wolverhampton are not generally felt to be harsh is shown by the fact that after the discussion on the case of insubordination, a testimonial for efficiency was presented by the chairman to another nurse whom he complimented upon her work and success.

NURSES AND MONEY-LENDERS.

A CLAIM was made the other day by a firm of money-lenders at Darlington against a nurse in the Bootham Mental Asylum at York, for £16, money lent under a promissory note. The loan was for £10, and the defendant, in her evidence, said that she spent part of it on clothing and part on a holiday at Leeds. In cross-examination she stated that she had borrowed £10 from money-lenders before and had repaid it. An order for repayment was made

in this case, £3 forthwith and the remainder per £1 a month, with costs. We hope that the experience of the nurse in this case will be a warning to others not to apply for financial help to money-lenders. Nurses, like other people, ought to arrange their expenditure on dress according to their means, and however much a holiday may be needed, the expedient of borrowing money at ruinous interest in order to obtain it, is certain to end in disaster.

NO NIGHT NURSE AT NORTHALLERTON.

THE Northallerton Guardians have resolved, in face of the warning of their medical officer, not to have a night nurse for the workhouse infirmary. There is no question as to the grave view taken by the medical officer. He concludes his letter to the Chairman by saying, "To leave these poor people unattended during the long hours of the night in an infirmary provided and managed by the Guardians of the poor, would be grievous neglect, and it shall not be done without an official protest by me." It has been agreed that "if a serious case arises" a night nurse is to be called in. Such a decision shows little heart and less knowledge on the part of those who sanctioned so crude and wanton a proposal. Will not the ratepayers of Northallerton join their formal protest to that of the medical officer against this neglect of the sick poor on the part of their Guardians?

AN INCIDENT AT BRISTOL.

AT Bristol Police Court last week a certificated nurse, aged 36, was charged with publishing a scandalous libel on a well-known citizen, and also with attempting to commit suicide by throwing herself over Clifton Suspension Bridge. Both charges were proved, and the accused, having made a complete apology to the gentleman she libelled, was bound over to be of good behaviour for six months. The interest of this case to us lies in the fact that the convicted person has been, until recently, matron of a maternity home. The evidence given at the police court tends to justify the conclusion that if the registration of nursing homes were compulsory she would not have had the opportunity of filling a position in which such qualities as self-control and self-respect are indispensable.

EPILEPTICS AND LUNATICS.

IN consequence of certain statements having been made respecting the treatment of patients in the imbecile ward of Leigh Workhouse, the Clerk to the Guardians replied at length to them at a meeting of the Board. We are not concerned with the precise matters on which the controversy arose, but we notice that the Clerk admitted that some epileptics are placed with lunatics, and pleaded that the same plan is pursued "in most of the Unions in this country." He also affirmed that it was the original intention, when the buildings were altered, that one portion should be set aside for the epileptics, but that it had not been found possible to carry out the intention. Nevertheless, no system of mental nursing can be deemed satisfactory in which provision is not made for the separation of epileptics and lunatics.

VACANCIES IN THE MILITARY NURSING SERVICE

THE matron-in-chief of Queen Alexandra's Imperial Military Nursing Service may now be seen on both Tuesdays and Thursdays at the War Office, Whitehall, between the hours of 10 A.M. and 1 P.M., by candidates for admission. There are still vacancies for staff nurses, which will be filled at once; but the applications are numerous, and the most eligible candidates have, of course, the best chance of being selected. The conditions of service and rates of pay have so frequently been given in our columns that we need only add that applicants must be between the ages of 25 and 35, and must possess a certificate of not less than three years' training in medical and surgical nursing in a civil hospital of not fewer than 100 beds, and recognised by the Advisory Board.

GUY'S HOSPITAL.

ON Friday evening last the members of the Pavy Gymnasium—assisted by some professional and amateur outsiders—gave their annual display and ladies' night in the Physiological Theatre at Guy's Hospital. The chairman, Dr. Pavy, was present, and some of the medical staff. The nursing staff was also well represented. There were some brilliant feats of swordmanship and fencing and "the Hand-cuff King" gave an exhibition. There was also an "Indian club solo." The proceeds of the performance are given to the Convalescent Home and Children's Home at Honor Oak Park.

LEGACY FOR THE JUNIUS S. MORGAN BENEVOLENT FUND.

By the will of the late Miss Charlotte May Bann, of 16 Church Road, Newton Abbot, the Junius S. Morgan Benevolent Fund receives a legacy of fifty pounds. This generous donor, who has so practically exhibited her sympathy with nurses, was a sister of Miss E. M. Bann, matron of the Brook Fever Hospital, Shooter's Hill.

MISS LOW'S CONDITION.

THE English nurse attached to the Nurses' Cooperation, who was sent out by Mrs. Lucas to attend Miss Low, reports that she is making satisfactory progress. She has been transferred to a private room at the hospital in Chambery, and her friend, Mademoiselle Lechat, visits her constantly.

SHORT ITEMS.

THE first Pound Days have just been held at Malton, Norton, and District Cottage Hospital, and the result is very encouraging seeing that the building was only opened seventeen months ago. On the two Saturdays set apart, 957 pounds in kind were received and £3 7s. in cash.—We are officially informed that Miss E. Shackleford, who has recently been appointed matron of the Royal Portsmouth Hospital, had previously held the position of assistant matron there for three years and a half.—At a meeting this month of King Edward the Seventh's Coronation Fund for Nurses in Dublin, applications for membership from 13 nurses were considered and accepted.

The Nursing Outlook.

"From magnanimity, all fears above;
From nobler recompense, above applause,
Which owes to man's short outlook all its charm."

THE NURSE IN COUNTY COUNCIL SCHOOLS.

THE work of the visiting nurses in the County Council schools is still a quite new thing, but there is no doubt that its value is appreciated by those in authority. This is proved by the fact that last April the staff of nurses in London was increased from 12 to 32. At present these nurses work independently, but Sir Shirley Murphy, Medical Officer of Health for the County of London, states in his report that it will soon be necessary to appoint a superintendent of nurses, in order that the work may be properly controlled and kept at a uniform level of efficiency. Children, parents, and even teachers, may occasionally put difficulties in the way of the necessary investigations, which a nurse who is timid or inexperienced might find it troublesome to deal with, but which would vanish at once under the influence of a tactful senior officer. An influence, however, which will make teachers keener on the subject of cleanliness is the fact that His Majesty's Inspectors of Schools are now taking note of the condition of the children in their reports. In one case an inspector complained that in a certain school many of the children were so dirty, as to be offensive both to their companions and to the teachers. He added that "unless considerable improvement was made in this important matter, the school could not be regarded as satisfactory." Teachers and managers will recognise the real weight of these very mild-looking words, and a criticism like this will make them welcome the visits of the nurse.

The nurse's work begins with insisting on cleanliness, though it does not end there. One of her most constant duties is the examination of the children's heads. The school nurses examined, in all, the heads of 72,993 children during 1905, of whom 61,983 were proved to be clean. Of the remainder, who were verminous, the majority, indeed more than half of the total offenders, were senior girls—that is, girls beyond the infant department. Some of these, but proportionately not many, were cleansed after the nurse had noticed their condition, without formal notice to the parents. Many waited for the first warning, and a third were not cleansed until the red card which gives the final warning, had been sent. Even then, 963 of the original 6,723 offenders remained in a filthy condition, until the nurse proposed that they should be excluded from school, and of these 506 were excluded and the parents threatened with prosecution. Prosecutions of the parents of 101 children actually took place.

Next to the girls the children in infant departments were the most to be complained of, though in much smaller proportion. Probably in these departments also it was the girls who were most offensive. The parents of 101 children were prosecuted and fined, but the preventive work of the nurse, and the habits of cleanliness enforced and begun through her warnings, are of more importance than the prosecution of the almost hopelessly neglectful parents, who require to be brought into court and fined for carelessness in such an obvious duty.

While, however, the nurse's work in compelling parents to keep their children's heads clean has made great progress, only a beginning has yet been made in the equally important but much more difficult task of enforcing cleanliness of the body and the clothing. In the Borough of Marylebone, however, the nurse examined the children in seven schools and found 65 whose bodies and clothing were so verminous that they were unfit to be in school. The names and addresses of these were sent to the medical officer of health, whose sanitary inspectors delivered cards, explaining, that the children could have warm baths and have their clothes sterilised free of charge, on given dates, within certain specified hours. This offer was taken advantage of by 36 of the children, 28 were made clean by their mothers, and only one left the school. At present the baths are available only at disinfecting stations, and in one case at the casual ward of the workhouse. While this remains the case, it will be difficult to insist on a high standard of cleanliness among children, who have but little convenience for ablutions at home. If, in this country, as in Germany and Holland, there were baths attached to each school, personal cleanliness would be more easily attained, and therefore with a higher standard of health among the children. As for clothing, one can but hope that, the damage done to fabrics by the sterilising process will incite mothers, who are at present careless, to cleanse their children's garments in the domestic wash-tub.

While these homely duties of looking for dirt and insisting on cleanliness remain the bulk of the nurse's work, there is also much important duty to be done in observing suspicious cases which may develop into infectious disease. The authorities of London are now asking for powers similar to those conferred on Glasgow by a Police Confirmation Act of 1904, by which it is ordained that, if a child is found by a medical officer or nurse to be in school in an objectionable condition, the parents may be ordered to cleanse the child within 24 hours, and if they fail to do so, the child may be cleansed at the public expense, and the cost recovered from the parents. If the right to do this were conferred on our school nurses, there is no doubt, they would be able to enforce the cleanliness desired with much less trouble and delay than at present. Hence it is to be hoped that the necessary powers will be granted ere long.

Nursing in Tropical Climates.

By ANDREW DUNCAN, M.D., B.S., M.R.C.P., F.R.C.S., Fellow King's College, Lecturer on Tropical Medicine at the London School of Tropical Medicine, and the Westminster Hospital.

V. ENTERIC FEVER

(Continued from page 219.)

In concluding our remarks on diet, it may be mentioned that unless the patient is in a state of stupor he need not be awakened if sleeping. He may be allowed to drink freely in the intervals of his feeds of water, or of home-made, not bazaar-purchased, lemonade from which the pips have been strained.

Before proceeding to discuss the general nursing of the patient, I would direct attention to the especial dangers that are imminent over an enteric fever patient, namely hæmorrhage, perforation of the bowel and its consequent peritonitis, and cardiac collapse, which, in my experience, has been more frequent in cases in the tropics than in those in temperate climates.

As regards hæmorrhage, Murchison found it to occur in the largest number of cases in the third week, so that the nurse should bear this in mind. It will be shown to have occurred by a sudden increase of the prostration, pallor of the surface, increased frequency of the pulse, and a sudden fall in the temperature. If the hæmorrhage be large in amount it often brings on fatal collapse, or may be followed by perforation: if small, it is not of so much consequence. With the onset of these symptoms the nurse should at once apply ice to the abdomen, and the best place to apply it is over the right iliac region; a waterproof sponge-bag will make an efficient vehicle for the ice. The patient should be given ice to suck, and be kept perfectly still. Further directions will be given by the doctor, who should be at once summoned. It must be remembered that the blood may be retained in the bowel and not appear in the stools. Lastly, if there are signs of collapse, the foot of the bed should be raised.

Perforation will be indicated by the sudden onset of severe abdominal pain increased on pressure, quickening of the pulse, rapid lowering of the temperature, vomiting, and an anxious, altered appearance of the facies. Complete rest must, of course, be enjoined, the fæces and urine being directed to be passed into the draw-sheet, and not into the bedpan, thus avoiding any movement. The bed-clothes should be kept off the patient by a cradle, bandbox, or pillows. No food to be given by the mouth, but entirely by the rectum. Ice may, however, be sucked. The doctor should be sent for at once. This distressing accident occurs most frequently in the third, fourth, or fifth week of the disease.

Peritonitis may arise also without perforation. Here the doctor will order the necessary remedy; it may be mentioned that hot spongio-piline is more easily tolerated than poultices by the patient.

Cardiac Collapse.—This, as remarked above, is found more frequently in the tropics than in temperate climates. It is perhaps commoner in the third week. The respiration becomes quickened, is very distressing, and sighing in character. The

impulse of the heart is very feeble and diffused, or may not be perceptible. The necessary directions will, of course, be given by the physician. I well remember a case of a brother officer who was nearly at the point of death from collapse, so much so that arrangements were made for his funeral in a few hours' time, it being in the hot weather. He was literally rescued from the jaws of death by the frequent administration of the subcutaneous injections of strychnine over the cardiac area.

Let us now consider the general nursing of the patient. Attention has already been drawn to the points relating to the room in which the patient lies and his feeding. First of all the enteric fever patient, it is needless to say, should be kept at perfect rest, this more especially in view of the dangers we have just been considering. The bed should not face the window, as this distresses him. He should never be allowed to raise himself for the purpose of getting anything from a table or chair by the bedside; but the nurse from time to time should carefully change his position in the bed, so that pressure be not constantly exercised on one part of his body, and thus occasion bed-sores. The occurrence of a bed-sore is generally a subject of reproach to the nurse. To obviate their appearance, the body must be kept scrupulously clean; it should be washed entirely night and morning, as this is most grateful to the patient. Any soiled bed-clothes will be removed at once. The mattress must be firm and elastic—a spring mattress with a horse-hair one over it is the best—and the bed-clothes kept free from creases and bread-crumbs. The skin must be ever kept completely dry, the draw-sheet should never be left wet, and this will have to be carefully looked after where there is incontinence of fæces and urine; in this latter case it is advantageous to anoint the skin with some greasy application such as lanoline or zinc ointment.

The usual sites for a bed-sore are the buttocks or hips, but they may occur anywhere. The skin in the above especial parts should be protected from the first day of the fever by rubbing it with—night and morning—spirit, such as brandy or eau de Cologne, or Friar's balsam, and then painting with collodion. The back must be examined once a day, and if any redness of the skin be discovered, then at once change the position of the patient, and let him lie on a circular pad or water-bed, and report the occurrence to the medical attendant. Should a bed-sore, in spite of all precaution, form, the nurse should keep the dressings ordered, on by the strapping, as bandages are apt to ruck up.

The mouth and nose should be looked after with care, as secretions are apt to dry and cake on them in hot climates especially. Hence, frequently during the day and night, and especially after food, swab out the mouth with some weak antiseptic lotion. The teeth must be brushed morning and evening. If the mouth is not regularly cleaned,

inflammation may arise, spreading through the Eustachian tube to the ear or down the larynx. Look out for any excoriation on the lips and tongue, and, if present, report to the medical attendant. If the mouth is in a good condition the patient will take his food far more readily.

The temperature should be taken at four-hourly intervals. Any sudden rise or fall must be at once reported. But inasmuch as a continued high temperature is largely responsible for the wasting and exhaustion of the fever, many authorities give directions that, as soon as it reaches 103°, measures for reducing it should be adopted, such as sponging the body, or applying iced water compresses, frequently changed, to the body.

In America the cold-bath treatment is by many practised. Thus, Osler states that for many years it has been his practice to give a bath of 70° every third hour when the temperature was above 102.5°. The patient remained in the bath for fifteen to twenty minutes, after which he was taken out, wrapped in a dry sheet, and covered with a blanket. Whilst in the bath the limbs and trunk are rubbed thoroughly. Food is usually given, sometimes with a stimulant, after the bath. The mortality by this treatment certainly appears to have been lessened. Thus at Brisbane Hare reduced his mortality from 14.8 per cent. to 7.5 per cent.

As it is unusual to find a bath in the tropics in which a patient can lie at full length, mention may be made of an apparatus contrived for this purpose by Henderson, of Shanghai. This consists of a long bamboo settee, used by the natives of China, in which the cross-bar at the lower end is removed to make way for the bucket to catch the water as it runs away. Underneath the seat of open bamboo-work a receiver of some waterproof material is fastened by tapes tied along the side of the couch, and sloping towards the lower or bucket end. The water is then continually poured over the patient, who is stripped and covered with a sheet. This was invented by Henderson for the treatment of sun-stroke, but can be used for the bath treatment of enteric equally well.

Another method is the "bed-bath." Around the edges of the bed are placed rolled blankets, and over these a rubber sheet, into which two or three pailfuls of water are poured. The patient is placed in the trough thus formed.

Points related to the excreta.—If there be more than four motions per diem the matter should be reported to the doctor, who will give his directions. If there be constipation this should also be brought to his notice, but on no account should the nurse give purgatives. The stools should, whenever passed, be examined for curds, in order to see if the milk be duly digested, or for sloughs. They should be covered over and saved for the doctor's inspection. Where there is incontinence of fæces pads of absorbent wool, sprinkled with some antiseptic powder and enclosed in butter-muslin, should be placed beneath the patient, and burnt immediately after removal. The method of disinfecting the stools will be described later on.

As regards the urine, there may be retention, which, of course, must be brought to the visiting

physician's notice. After the catheter has been used, this must be scrupulously cleaned and sterilised. Where there is incontinence of urine this must be reported, and especial care taken as regards bed-sores, all soiled clothing being at once removed. The bed-pan must be used from the first, and care must be taken not to bruise the patient with it.

Tympanites is best met with by the application of the turpentine stupe or by the long rectal tube. Sir Wm. Jenner used to direct a flannel roller to be placed beneath the patient, then a double layer of thin flannel, wrung out in very hot water with a drachm of turpentine mixed with the water, was applied to the abdomen and covered with the ends of the roller.

Epistaxis.—This may be troublesome. When it appears the nurse should raise the patient's head on a pillow, and bathe his forehead and nose with ice-cold water. Should this not stay the bleeding, the doctor may have perhaps to plug the nostrils.

Lung Complications.—We usually find a certain amount of bronchitis in a case of enteric, and this may cause much sleeplessness from the constant cough. A more formidable complication is pneumonia. Where this occurs we must not allow the patient to be continually on his back, as by so doing the lower parts of the lung become much congested, and a hindrance to the necessary amount of air arises. Hence, the nurse should be directed to change the position of the patient in bed, first turning him on one side and then on the other, supporting him in the required position by pillows.

Phlebitis is more likely to complicate enteric fever in the tropics than in temperate climates. The veins of the lower extremity are most usually affected. When this occurs, the nurse will find the leg swollen and tender, these symptoms having appeared more or less suddenly. The nurse must impress on the patient on no account to move the parts, lest a portion of the clot be loosened from the vein into the circulation, when sudden death might occur. The limb should be elevated and bandaged carefully, beginning at the toes.

Tender toes.—Handford describes a curious condition of the toes, which become extremely tender at their tips and pads, so that the weight of the bed-clothes cannot be borne. It has been found most common after the bath treatment. The nurse should take off the weight of the bed-clothes here by a cradle.

Mental symptoms.—There may be extreme restlessness on the part of the patient. In such a case one nurse must give her undivided attention to the patient. Padded boards should be fixed to the sides of the bed to prevent him falling out.

Treatment during convalescence.—As regards food, the usual rôle is to keep the patient on to his fluid diet for ten days after the temperature has fallen to the normal. The nurse's attention must be ever on the watch to ensure this, for as the fever ceases the appetite of the patient may become ravenous. I well remember a case in my student days in which, unknown to the nurse, a friend on the visiting day at the hospital brought a patient an orange. Next day she was seized with peritonitis, with a fatal result. At the post-

mortem an orange pip was discovered in the peritoneal cavity, together with the perforation through which the pip, and with it her life, had passed. After the period of ten days the diet is cautiously

increased under the direction of the doctor. During convalescence the nurse must also be on the look-out for complications, such as phlebitis and bed-sores.

(To be continued.)

The Nurses' Clinic.

VOMITING.

SICKNESS, in the sense of vomiting, is one of the commonest ills to which flesh is heir, so much so that like common colds it is often thought lightly of and sometimes not recognised as a possible symptom of disease. Infants in arms frequently vomit after every feed, but if the quantity vomited is small in proportion to the amount taken and the child continues to thrive, it is of no consequence, but is regarded as a kind of safety valve to prevent the stomach being overloaded. If, however, all is not well with the child and he throws up a good deal in a curdled condition with an unpleasant odour, and constant diarrhoea supervenes, it is time to call in a medical man, as these little creatures are rapidly reduced to a state of collapse if not taken in time.

Vomiting in older children may point to the onset of some disease, such as scarlatina or measles, or it may be the result of too rich and unsuitable food, or a sign that worms exist, or a symptom of gastritis, or if apparently quite causeless it may be connected with brain trouble, or if sudden in onset and in combination with abdominal pain and constipation it may point to some internal mischief such as hernia, intussusception, or appendicitis. Sickness in children should always be carefully noted so that a clear report may be given to the doctor. He will want to know the quantity, the appearance, the frequency, the time, the colour, the consistency, whether any pain or griping is associated with it and how the general health and appearance have been affected; unless all these points have been carefully noted by the nurse or mother it is difficult for a busy doctor to elicit really satisfactory answers during the time he is examining the little patient, and children can very seldom render any help in describing their symptoms. Sometimes sickness seems to be of nervous origin and lasts for two or three days with some fever and exhaustion and then goes, but returns again in a few months. These attacks are nevertheless somewhat alarming, and the child should always be seen by a medical man; amateur physicking is as likely to do harm as good.

Vomiting is perhaps even more distressing in an adult, and every nurse knows the importance of noting everything in connection with it. Green "chloroform sickness" following after an operation is very familiar. So long as the patient is vomiting the nurse must be in attendance to keep him as still as possible, instructing him to merely turn his head on one side while she holds the porringer with one hand and with the other gently but firmly supports his wound (particularly if abdominal) to prevent the stitches breaking down under the retching. Simple chloroform sickness calls for no treatment and soon subsides, but any further post-operation vomiting must immediately be reported.

In most cases of cerebral trouble there is sickness to be found, generally associated with headache and having no connection with food. In any accident, too, the chances are that there will be some vomiting, so a little forethought will prevent any distracted rushing about for utensils and clean linen.

Then there is the vomiting of early pregnancy with which some young married women are hardly cognizant. Here

the private or district nurse can often soothe an anxious mother's fears by assuring her it is nothing unusual.

Any vomit passed must be kept for the doctor's inspection; in hospitals one does it as a matter of course, but in private houses and in the district how often it happens that well-meaning friends clear away all traces, and perhaps only mention as a casual afterthought that the patient was sick during the day, and no amount of questioning will elicit a satisfactory account of the characteristics of the vomit. It is well to impress upon the friends at the outset the importance of sickness, and with a little tact and persuasion they will soon begin to see it from the nurse's point of view. How varied in colour alone are the different kinds of vomit, so much so that one can hardly expect the lay mind to grasp the significance of even that one point. There is the green sickness of an anæsthetic, the yellow vomit in liver complaints, the dark-coloured hæmatemesis, the brighter red hæmoptysis, the chocolate, viscid vomit associated with liver abscess discharging into the lung, and though, strictly speaking, these two last are sputa, the same nursing rule applies.

The distressing sickness in some stomach affections, such as cancer of the pylorus, is often treated by washing out the stomach, of course, under medical supervision, but a nurse should always be ready to learn lavage, as it is now so frequently employed.

One last word on sea-sickness, for which no definite cure it seems has yet been discovered; in fact, except by the victim it is looked upon as rather a joke, but those who know the intolerable retching, misery, and exhaustion can see little humour in it. A friend going to South Africa was so ill that, in spite of protestations, she insisted on buying a supply of some nostrum warranted to cure sea-sickness in twenty-four hours. This she took liberally, with the result that she was very much worse and practically did not recover the whole voyage. In some cases champagne is excellent, others can take bitter beer, and some crave for pickles or raw tomatoes. In any case never starve before going on board, but eat a good, easily digested meal about two hours before starting.

It has been said that a towel wrung out in hot water and bandaged as tightly round the head as can be borne is an excellent remedy. Others say that a cayenne poultice at the back of the neck is a good recipe; both suggestions might easily be tried as they are safe and simple.

To Nurses.

We invite contributions from any of our readers, and shall be glad to pay for "Notes on News from the Nursing World," "Incidents in a Nurse's Life," or for articles describing nursing experiences at home or abroad dealing with any nursing question from an original point of view, according to length. The minimum payment is 5s. Contributions on topical subjects are specially welcome. Notices of appointments, letters, entertainments, presentations, and deaths are not paid for, but we are always glad to receive them. All rejected manuscripts are returned in due course, and all payments for manuscripts used are made as early as possible after the beginning of each quarter.

Incidents in a Nurse's Life.

NEW ZEALAND IN THE 'EIGHTIES.

THE Dunedin Hospital was the last of the important hospitals of New Zealand to make any pretence of training nurses, or even to require previous training in the nurses engaged, and in the 'eighties it was positively benighted in its methods of administration in this respect. An institution of 110 to 120 beds, no female nurse was admitted to the wards set aside for the men-folk. I was the first nurse with three years' English experience to be taken on, and during my two years there I never saw the inside of a men's ward—no more, at least, than might be seen by an occasional and surreptitious glimpse through a door unguardedly left open.

Hearing once that some difficulty was being experienced in procuring a suitable man for a vacancy in one of these departments, I intimated that I would be quite willing to take it myself, either temporarily or otherwise, and it took quite a long time afterwards to reassure the matron of my claim to be considered respectable. She never went into a men's ward herself, the attendants there having a superintendent as uncompromisingly of the masculine gender as themselves. Any domesticated man of good character and active habits did for male nurse; any woman of the same qualifications had hitherto done for a female one; and up to my time the last nurse engaged, albeit she had never seen the inside of a ward before, made her debut as sole night nurse in charge of forty patients scattered over four wards, and including cases of all descriptions of medical and surgical illness, from major operation to chronic rheumatism.

The hours of both day and night nurse were from six to six. Each day-nurse had the care of twenty-two patients—medical in one case, surgical in the other—and in her own department, except for what help she could get out of convalescents, she did absolutely everything herself—looked after her patients, cleaned her fireplace, washed the dishes, cleaned the windows (inside), polished the brasses, scrubbed the tables, lockers, bath-room, lavatory, and ward-kitchen every day, and the whole ward once a week, the latter by degrees, a piece every day as she could find time. And as if this were not enough for one pair of hands, she carried up all the logs required for the ward fire from the basement yard to the top story, and the ward washing was returned rough-dry from the laundry to be folded in the wards. The furniture of the ward-kitchen included a set of flat-irons, so that if a nurse could make time and was "natty" enough she could iron the pillow-cases, but this was not compulsory.

The day-nurse's time off duty was one afternoon a week and every alternate Sunday from two o'clock. The night-nurse had every Sunday evening, coming on at ten instead of six. Consequently the day-nurse, on all day, did an unbroken shift of sixteen hours, with double duty after two. The nurse's dietary was of the simplest description. Butter, tea and sugar, with an occasional tin of jam thrown in, was served to her every week on the ration principle, and kept in a cupboard in her room in readiness for her meals, which, all but her dinner, she took there. As a supplement to these she got for breakfast every day except Sunday—a plate of porridge and a chop, sent up on tin or enamel plates from the main kitchen about half an hour after the ward breakfast. On Sunday liver-and-bacon was substituted for the chop, and scones were provided for tea. Dinner was taken in the matron's company in a room in the basement, containing nothing whatever by way of furniture but a deal table and the requisite number of chairs. The meal was invariably beef or mutton, with potatoes and cabbage; pudding on Wednesdays and Sundays. The nurses lived two in a room (the rooms being adjacent to the wards)—the two day-nurses together, the night-nurse and the housemaid, the latter being the only female servant besides the three laundresses which the institution possessed. She was for attendance on doctor's, dispenser's, secretary's, and matron's rooms; the nurses attended to their own. But in this process there was much to shift. All the furniture consisted of a bed and a chair, a piece of carpet, and a few hooks in the wall. We improvised tables of inverted packing-cases, draped in white calico—afterwards used for poultice cloth—and we bought our own window-blinds and looking-glass. We went without floor covering, and did not aspire to ornaments, for we neither had time to enjoy nor to dust them.

I had the privilege of seeing a good many changes for the better, however, even in my two years. When I left in 1888 the man-nurse was still in possession of the men's wards, managing them as best he could, considering that he had sixteen patients and neither help nor experience save what he had picked up for himself. But in the female department things had progressed. We had trained nurses, a probationer apiece, and a weekly charwoman. We had also the firewood carried up for us, and the ashes carried down. The stone floor of the dining-room had matting laid down; the packing-cases in our own rooms had given place to real tables, and we had a pudding every day and a change every morning for breakfast. To-day, I believe, in every way the Dunedin Hospital ranks with the best in the colony.

Maternity Training at the British Lying-in Hospital.

INTERVIEW WITH THE MATRON. BY OUR COMMISSIONER.

A FAIR idea of the urgent needs which are supplied by the British Lying-in Hospital may be gathered from the fact that, as Miss Gertrude Knott, the matron, told me last Thursday afternoon:

"Sister and I booked this morning as many as fifty patients to come in some time during the next three months. This 'booking-day' occurs weekly."

"Their names have to be entered practically three months in advance?"

"Yes, that is indispensable, owing to the great demand for beds."

"And the demand increases?"

"Here are the figures for the last two years. In 1906 the number of in-patients was 515 and the number of out-patients 802; in 1905 they were respectively 484 and 665."

"Can you tell me how these figures compare with the position when you came to Endell Street?"

"When I came here nearly nine years ago, the average number of beds occupied was six; now it is 20. We have 28 beds, and during November and December last year, we had to send several patients home, because we had no room for them. In each case a midwife accompanied them to their home, in order to attend them there. So you can judge from this, that the hospital, though the oldest of its kind in London, has kept pace with the times."

MATERNITY TRAINING AT THE BRITISH LYING-IN HOSPITAL—*continued.*

THE PATIENTS.

"What is your record in regard to deaths and cases of sepsis?"

"Neither in 1906, nor in 1905, was there either a single maternal death or case of sepsis. We have no resident medical officer here."

"Most of your patients, I suppose, are poor women?"

"The great majority are the very poorest; many of them are the wives of Covent Garden porters. It is a common thing for patients to say that 'the only fortnight of luxury' in their lives is the fortnight they spend here."

"A fortnight is the usual period?"

"Yes, the only exceptions are cases of bad confinements."

"What are the arrangements for your out-door patients?"

"There are three fully-qualified midwives holding the certificate of the Central Midwives Board in attendance on out-door patients attached to the hospital. Each has a very large district. One is in Westminster, another comprises Pentonville, and, in fact, a great part of Islington; and the third Newington and Stamford Hill. They live in their own homes, and work from them. The sister manages the out-patients within a radius of a mile and a-half of the hospital, and takes the pupils out to their cases. In these homes the pupils acquire confidence, and learn to be resourceful, especially if a case becomes acute before they send back for help. The out-patients are practically as poor as the others."

TEACHING AND EXPERIENCE.

"How many midwifery pupils and monthly nurses do you train in twelve months?"

"Twenty-six midwifery pupils and about 120 monthly nurses. The average number of applications during the year is 813. We have accommodation for seven pupil midwives and 16 monthly nurses. The former come for four months, and the latter for two, but the pupils have to undergo a preliminary month of training in monthly nursing in the wards before they take their midwifery."

"Do the pupils, after they leave here, go in much for district work?"

"No, I regret to say that most of them at once take up private nursing, because they seem to be afraid of the responsibility of district work. It is a pity, because the experience is so valuable. Nothing, in my opinion, is equal to experience; but, of course, teaching is essential."

"You might give me an idea of the teaching here?"

"The practical teaching in the wards is under the sister and the staff nurses, and I give it in the labour-room. Both sister and myself are constantly in the wards at all hours of the day and night. There are six wards on three floors, with a labour-room between each. A staff nurse is responsible for three wards and for the nursing of the mothers and babies in them."

"What arrangements are made for night duty?"

"Two monthly nurses, and one pupil midwife have been doing night duty so far. As, however, the number of cases is increasing so rapidly, we are going to have a permanent night midwife, who will take all the normal cases."

"You have a visiting staff?"

"Oh, yes, and they deliver lectures to midwifery pupils constantly. I, too, give some. I am afraid that the tendency of the day is to overdo the teaching, and that is why I would emphasise the importance of practical experience and explanation when the demonstrations take place."

AN IDEAL COURSE OF TRAINING.

"How many of the monthly nurses and pupils have had general training?"

"About 30 per cent. of both classes, and the percentage is increasing. The age for admission is from twenty-one to forty-five. But I think that it is better to take midwifery training after, and not before general training. My ideal is for a nurse to commence with children's training, go on to general training, and then take midwifery and special training, such as ophthalmic or fever work."

"Have you yourself realised this ideal?"

"Not quite. I had children's training at Peadlebury Hospital, general training at Guy's Hospital, and then I came here as midwifery pupil, and stayed on ever since, first as sister and then as matron. I became matron six years ago. The sister who succeeded me, and is now my valued colleague, was trained at St. Thomas's Hospital, and was afterwards sister at the Royal Waterloo Hospital for Children and Women."

THE NURSERY.

"No doubt in recent years many improvements have been effected?"

"When I came there were several flock mattresses, and wooden bedsteads; now there are horse-hair mattresses and Lawson-Tait bedsteads. For bare boards and wooden tables have been substituted linoleum and tile-topped oak tables, and for coloured check quilts, white counterpanes."

"How long has your well-equipped nursery for babies been in existence?"

"Only three years. As you are aware, the old-fashioned plan is to have all the babies washed in the wards with the mothers. The room we have just been into was formerly divided into cubicles. The advantages of the present arrangement are very great. Although the mothers do not have the experience of seeing the babies bathed, the pupils can be more conveniently shown the way than if they were in the wards, and the crying does not disturb the mothers, who are able to sleep from 10.30 to 1. The nurses, too, have more confidence in handling the newly-born, than when the mothers are watching."

THE HOME AND HOURS.

"We abolished the cubicles," continued the matron, "when the Nurses' Home was opened by the Princess of Wales in 1903. It accommodates twenty-two, and contains a separate bedroom for each nurse, separate sitting-rooms for the monthly nurses and the midwifery pupils, and a large dining-hall, in which all the meals are taken."

"The dining-hall is a very fine one."

"It was built on a vacant space, and the earth had to be dug away to make it. With regard to meals, I take the dinner, and the staff nurses the other meals. But we cannot be so regular as in ordinary hospitals, owing to cases occurring at all times. The fixed hours are: Breakfast at 8, wards at 8.30, dinner at 1.30, tea at 5, supper at 8. The nurses are supposed to be off duty for two hours either morning, afternoon, or evening, but they often give up this time and stay in to see cases."

"What are the terms of admission?"

"The fees for the midwifery course amount to £32, and for monthly nurses £12 14s. 6d. Hospital nurses who go through the midwifery course here are very often offered the appointment of night sister elsewhere subsequently. The value of their training here, without medical students, and in emergencies, is recognised. There is no emergency more trying than a case of hæmorrhage in midwifery. When a nurse is equal to that, she can cope with almost anything that may occur."

THE INDISPENSABLE QUALIFICATIONS.

"How often do you send up pupils to the examinations of the Central Midwives Board?"

"Every four months. The terms have necessarily to overlap a little. The Act has been an advantage to us. We scarcely ever have a failure at the examinations. Midwives should, if possible, be of good education, and we are trying to level up monthly nurses, who, of course, are taken from a lower social class. It is wonderful to see what example and influence will do for them."

"To finish with, I should be glad if you would indicate the qualities which you consider indispensable for maternity nurses?"

"I am sure that no one should take up either midwifery or monthly nursing, who has not an intense love for small babies and can maintain their interest in them. They should possess great patience with them and great sympathy for them. Tact is equally indispensable, and conscientiousness is a vital quality. For those who love the work it is most absorbing, and I cannot possibly exaggerate the importance of nurses impressing upon the mothers the duty of nursing their own infants. If a mother nourish her child for nine months before it is born, she ought to do this on every possible occasion, when the child lives a separate existence."

"A Probationer Loses Her Sight."

It is an interesting fact, which may be new to some of our readers, though it is doubtless known to others, that the Royal National Pension Fund for Nurses had its origin in the case of a nurse contracting typhoid fever in consequence of a typhoid patient spitting in her mouth. The founder of the Fund was so struck by the cruelty of allowing a zealous nurse to become totally incapacitated for her work owing to her faithful discharge of her duty under most aggravated circumstances that he determined to organise a Nurses' Pension Fund. His aim was to make it possible for all nurses to secure provision for themselves in the event of partial or entire disablement from sickness or accident.

We recall the circumstance because of the sequel to the sad case of a probationer at the West Ham Poor-law Infirmary, which was referred to in our issue of January 5. It will be remembered that she lost her eyesight through a patient suffering from typhoid fever spitting in her eye, and that all the responsibility the Guardians could take upon themselves to do for her was to assure her that "so long as she behaved herself" she would be employed by them.

The account of the injury inflicted upon the probationer aroused general sympathy, and one of our subscribers in Italy was so obviously touched by the pathetic incident that we have received the following kindly communication with the enclosure mentioned. The letter speaks for itself, and we publish it with much pleasure as a striking instance of the manner in which misfortune incurred in the performance of duty excites just appreciation:—

January 13, 1907.

In THE HOSPITAL of January 5 I read a short account of how a probationer at the West Ham Poor-law Infirmary has lost the sight of one eye, while that of the other eye is also impaired. The poor consolation offered by the Guardians induces me to show my sympathy in a practical manner, and I cannot but feel that others might wish to do the same.

I enclose £5 for the unfortunate probationer, and should feel so glad if my small donation could head a list in your paper of other gifts, however small, and so perhaps result in a little "nest-egg" for one who suffers in the discharge of her duty. As I wish to remain anonymous, I shall be glad to read in a future issue of THE HOSPITAL that my letter and the note for £5 has reached you safely. Yours faithfully,

"ANONYMOUS."

A Retrogression in Edinburgh.

WITH further reference to the letter under this heading which appeared in THE HOSPITAL of December 1 last, our correspondent, having been called upon by us for proof of her statements regarding the management of Mavisbank (now New Saughtonhall) Asylum, has failed to substantiate any of these statements. We therefore renew our expression of sincere regret that anything untrue and defamatory concerning Mavisbank (now New Saughtonhall) should have appeared in our columns, and we make an unreserved apology to Sir John Batty Tuke, the Medical Director of that Institution, and to Dr. J. Batty Tuke, the Medical Superintendent, for the publication of the letter in question.

Everybody's Opinion.

[Correspondence on all subjects is invited, but we cannot in any way be responsible for the opinions expressed by our correspondents. No communication can be entertained if the name and address of the correspondent are not given as a guarantee of good faith, but not necessarily for publication. All correspondents should write on one side of the paper only.]

MIDWIVES' ASSOCIATION FOR MANCHESTER.

MRS. FANNIE M. EDDIE and MRS. MALCOLM, co-secretaries of the Midwives' Association, 9 Albert Square, Manchester, writes: Will you kindly permit us to call the attention of your readers to the Midwives' Association recently formed in Manchester? The objects of the Association are for the benefit and protection of midwives, watching all new legislation affecting the profession and providing legal aid for its members. All registered midwives are qualified for membership. The committee and officers consist of members duly elected by the Association.

[We should like to have a copy of the rules and the names of the committee and officers.—ED. THE HOSPITAL.]

NURSES' HOME, FAKENHAM.

MISS S. HAMOND, Superintendent of the Nurses' Home, Fakenham, writes: I am anxious to bring before the public through the medium of your valuable paper the position in which I find myself with regard to the Fakenham Nurses' Home. This institution was started by my mother, the late Mrs. Robt. Hamond, 33 years ago, with the object of nursing in the cottages, small farmhouses, and in other families where the income is very small, at very reduced fees, and in some cases free of charge. From the commencement of the Home up to April 1905 thousands of cases have been nursed gratuitously and at very reduced fees. I am sure that the public will agree with me that much suffering has been relieved by nurses in the cottages, which could not be touched by any of our hospitals, grand institutions as they are and a glory to our country. Your readers will readily understand that where there are 50 cases that can be removed to hospitals there are hundreds that cannot be moved, and when the breadwinner is laid aside with critical illness the services of a skilled nurse are urgently needed, and an inestimable boon, and the medical men in these days are determined to have them. Sir Alan Manby, the King's physician at Sandringham (who is a valuable member of our Finance Committee), is very strong upon this point, and, as he has a large practice in West Norfolk, his opinion is worth having. Her Majesty Queen Alexandra has been president of the "Nurses' Home" since 1892, and has given an annual subscription of £10 since she has been Queen. I think it possible that there are those interested in nursing who would be sorry to see the work of this institution curtailed, and the carefully chosen hospital-trained nurses, who are able and willing to adapt themselves to all classes, dispersed, for the want of a few hundred pounds. My object in writing is to let the benevolent public know that to carry on the work of the Home we need £1,000 in donations, and that unless some £700 is contributed within a month to meet our present pressing liabilities, this institution, to which I have devoted much of my life, must be seriously crippled. I confidently

look to the Christian philanthropists of England to come to my assistance, and thus save the situation.

WORKHOUSE NURSING.

"A SUPERINTENDENT NURSE" writes: As a superintendent nurse I am truly grateful for the plain speaking of "M. D." on the existing system of workhouse nursing, my position being exactly as "M. D." so ably depicts it. Fully equipped with the necessary credentials, I accepted my present appointment full of enthusiasm for the work, hoping that, by the exercise of tact and goodwill, I might overcome any tendency to unreasonable prejudice. I have failed absolutely. From the beginning a sort of underlying jealousy has been dominant, a spirit of unrest created among the nurses, one of them being told by the master it was quite unnecessary to consult the "sister" about off-duty time, he could always manage it. Sometimes the indisposition of a workhouse inmate has been brought to the notice of a nurse, and her opinion obtained as to the nature of treatment advisable, when I have been on duty. Not only am I in total ignorance of a nurse's credentials when changes occur among the nursing staff, but do not have an opportunity of even speaking to her until she comes to commence her duties. The matron of the workhouse escorts her round the infirmary wards on the day of the appointment; she has also, in the absence of the regular medical officer, escorted his deputy round some of the wards, before making me cognisant of his presence. I could quote many instances of the like indignities I am called upon to cope with. Although associated with Poor-law institutions for a number of years, I never can understand the human weakness at the bottom of this "prejudice." Surely there is sufficient scope in all workhouses for the exercise of that love of power (present with many of us) without encroaching on the corner devoted to the sick. I take it that the aim and ambition of any master and matron should be to prevent overcrowding of the infirmary wards by paying more attention to the cleanliness, clothing, and feeding of the inmates and the children in the schools connected with the workhouse. A great deal of unnecessary work might be spared the often overtaxed superintendent nurse and her staff if separate towels and flannels were provided for each child, the children inspected daily, and in the event of anything infectious or contagious breaking out among them, immediate removal of the patient, stoving of the bed and bedding, cleansing of the bedstead with strong disinfectants, and a free current of air allowed to purify the room. I look forward to a time when a matron and superintendent can work in unison, and thus be a great help to one another.

A Children's Fancy Dress Dance.

ONE of the prettiest sights and most successful entertainments of the New Year was the children's fancy dress dance at the Hotel Cecil. Its object was charity, but it fulfilled an even more useful purpose by bringing together the children of a large number of zealous workers in the cause of the hospitals, the whole of whom thoroughly enjoyed themselves. Prizes were given for the prettiest costumes selected by the votes of the audience, a system which enables fond parents to gather their friends together and put their child at the head of the poll, whatever costume they may wear. The system is a bad one. If prizes are necessary, judges of knowledge and taste should be selected, and the decision left to them entirely. In any case the ball gave an infinite amount of pleasure to hundreds of children and their parents, and the whole of the arrangements reflect the greatest credit upon Mrs. Johnathan Smith and the small committee of ladies who worked so successfully under her direction.

"The Hospital" Convalescent Fund.

THE Hon. Secretary begs to acknowledge with thanks the receipt of 2s. 6d. from "Alison," being her annual subscription to this fund.

Appointments.

ABERGAVENNEY VICTORIA COTTAGE HOSPITAL AND DISPENSARY.—Miss Lillian Smith has been appointed matron. She was trained at the Salford Royal Hospital, Manchester, where she was afterwards sister. As a sister of the Army Nursing Service Reserve, served in South Africa. She has been matron to the Cottage Hospital, Bromyard, and for nearly four years matron to St. Mary's Hospital, Tenbury.

EAST INDIAN RAILWAY COMPANY.—Miss A. I. Thompson has been appointed nurse. She was trained at the Seamen's Hospital, Greenwich. She has since been sister at the Women's Hospital, Soho Square, and charge nurse at the South Eastern Fever Hospital, London. She holds the certificate of the Central Midwives Board.

JOHNSON HOSPITAL, SPALDING.—Miss E. Glenny has been appointed staff nurse. She was trained at Southwark Poor-law Infirmary, East Dulwich.

WEST LONDON HOSPITAL, HAMMERSMITH.—Miss A. McLean has been appointed night superintendent. She was trained at the Royal Infirmary, Liverpool. She has since been sister at the Wolverhampton and Staffordshire General Hospital, sister at the Royal Hospital, Sheffield, and home sister at the Royal Infirmary, Hull.

WIMBLEDON ISOLATION HOSPITAL.—Miss Eliza S. Stone has been appointed charge nurse. She was trained at Lewisham Poor-law Infirmary. She has had four years' experience at the Fountain Fever Hospital, Tooting, London, and has been charge nurse at Leicester Isolation Hospital.

Queen Victoria's Jubilee Institute.

WE are officially inspired by the authorities of Queen Victoria's Jubilee Institute for Nurses that Miss L. Costelloe has been appointed to Limsfield, Miss Gertrude Fisher to Sunderland, Miss Emma Gladwin to Willenhall, Miss Harriet Marchant to Warrington, Mrs. Randall to Portslade, Brighton, Miss Emily G. Tindle to Bradford Home, Manchester, and Miss Ethel G. Williams to Widnes. Miss Eva Pashley has been transferred to Holmfirth from Lowell Street, Leeds; and Miss E. J. Sutton to Ardwick Green Home, Manchester, from Birmingham.

Words of Consolation.

THE ENGLISHMAN'S BIBLE.

IN "The Life and Letters of Frederick W. Faber," by John Edmund Bowden, second edition, p. 337, a most interesting account is given of the effects of Bible reading upon the mind and character of Englishmen. Mr. F. W. Faber became a convert from Protestantism to Rome, which makes his testimony the more valuable, and accounts for the use of the word "heresy" in the first sentence which follows: "Who will say that the uncommon beauty and marvellous English of the Protestant Bible is not one of the great strongholds of heresy in this country?" "It lives in the ear like a music that can never be forgotten, like the sound of church bells which the convert hardly knows how he can forego. Its felicities seem to be almost things rather than words. It is part of the national mind, and the anchor of the national seriousness. The memory of the dead passes into it; the potent traditions of childhood are stereotyped in its verses. The power of all the griefs and trials of a man is hidden beneath its words. It is the representative of his best moments, and all that has been about him of soft and gentle, and pure and penitent and good, speaks to him out of his English Bible. It is his sacred thing which doubts have never dimmed and controversy never soiled. In the length and breadth of the land there is not a Protestant with one spark of religiousness about him whose spiritual biography is not in his English Bible."

The Hospital.

Nursing Section.

Contributions for "THE HOSPITAL," should be addressed to the EDITOR, "THE HOSPITAL"
NURSING SECTION, 28 & 29 Southampton Street, Strand, London, W.C.

NO. 1,664—VOL. XLI.

SATURDAY, FEBRUARY 2, 1907.

Notes on News from the Nursing World.

THE PROPOSED EXAMINATION OF QUEEN'S NURSES.

THERE has not been any conference between the authorities of the Queen's Jubilee Institute and the superintendents respecting a scheme for the examination of district nurses after their six months' training. Such a scheme is under consideration, but until it has been finally approved by the authorities, it might be misleading to give any details, and it would certainly be premature to criticise. It is probable, however, that at an early date the conditions of admission to the roll will include ability to pass a written examination on a number of important practical questions.

THE CENTRAL MIDWIVES BOARD AND THE PRIVY COUNCIL.

A SPECIAL meeting of the Central Midwives Board was held on Thursday last week in order to receive and consider a communication from the Privy Council concerning amendments to the Rules. Our representative attended for the purpose of reporting the proceedings, but at the outset a motion was proposed that the sitting should be held *in camera*, and carried; and it was subsequently signified that "no communication would be made to the Press." The Board have, of course a perfect right to exercise their discretion on the question of admitting reporters to their sittings, and, though we regret that they resolved in this case to deliberate with closed doors, we have no doubt that they had excellent reasons for their decision.

A HOSPITAL FOR NURSES TO AVOID.

WHEN extra nurses are required at the Tiverton Isolation Hospital, they will not find there adequate or healthy bedrooms. At a meeting of the Board of Management, which was held the other day, the Mayor in the chair, the architect reported that when the wards were full and extra nurses were needed, as was the case during a recent epidemic of diphtheria, the day nurse on such occasions occupied the one available bedroom at night, and the night nurse by day. The statement of this fact elicited from a member of the Board the remark that nurses expect "to have a bedroom to themselves." In reply to a question as to whether the arrangement caused much inconvenience, one of the Board said that, anyhow, "it was keeping the bed warm—rather an advantage in the winter." When it had been ascertained that proper sleeping provision would involve an expenditure of about £300, the suggestion was "humorously" made by

the same gentleman who advocated a "warm bed" that the new cart used by the District Council to bring in clothes for disinfection might be employed as a bedroom. Ultimately, the Mayor, having deplored the passing inconvenience, thought that as the epidemic had been "tided over," nothing need now be done. Cubicles are bad enough, but to make a nurse who has been working all day or all night in a ward crowded with diphtheria patients sleep in a small room which has been occupied all the previous night or day, is disgraceful. This is clearly a case for the prompt attention of the Local Government Board.

AN INADEQUATE STAFF AT COVENTRY INFIRMARY.

THE result of an inquiry by a Committee of the Coventry Guardians into the question of the nursing staff at the Poor-law Infirmary is conclusive. They find that the wards are overcrowded, and that the nurses are much overworked. "There was one night nurse"—we quote the words of one of the Guardians—"for 78 patients and another night nurse for 28 patients"; and the report of the Committee says: "At the present time there is one nurse to each 21 patients." It is proposed to remedy this extremely unsatisfactory condition of affairs by promoting two female attendants on female imbeciles to be assistant nurses, and appointing two new attendants. Not one of the four, it will be observed, is a trained nurse, and we do not think that the Coventry Guardians have at all grasped the significance of their own figures, which clearly prove that with 173 patients in the Infirmary more trained help is urgently demanded.

RESIGNATION OF MISS RAMSDEN.

AT the meeting of the Marylebone Guardians last week the resignation of Miss Grace A. Ramsden, matron of the Infirmary, was announced. This step which, in common with the Guardians, we much regret, is due to failing eyesight. About five years ago Miss Ramsden underwent an operation on one eye, and in the opinion of an eminent ophthalmic surgeon, the other eye has suffered from the amount of clerical work which she has been doing for a long period. In these circumstances, the Guardians have decided, subject to the sanction of the Local Government Board, to add three years to the time of her service for superannuation purposes; and to grant her a superannuation allowance of £67 per annum. Miss Ramsden, who is extremely sorry to relinquish her work, has been at St. Marylebone Infirmary for nearly seventeen years. She

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entered as assistant matron, and at the end of nearly ten years succeeded Miss Vincent as matron. St. Marylebone Infirmary, thanks largely to Miss Vincent, the first matron, enjoys a unique reputation, and was a recognised training school in days when the standard of Poor-law training was very low. The school was started in connection with St. Thomas's Hospital, and the Nightingale Home at North Kensington was the first nurses' home built in connection with a workhouse infirmary. Under Miss Ramsden's auspices, the high standard adopted when the school was gaining ground has been steadily maintained. She herself was trained at the Edinburgh Royal Infirmary and was afterwards sister at the Liverpool Northern Hospital and night superintendent at the Derbyshire Royal Infirmary. Before her appointment sisters were usually introduced from outside, but Miss Ramsden, having found the experiment of choosing one of the St. Marylebone Infirmary nurses highly successful, has since made it a point of selecting sisters on the same principle. During her matronship an up-to-date operating theatre has been added, and is a great benefit and help in training. The probationers have to take their turn in waiting upon, and helping at all operations, which are very numerous and varied. In recent years the staff has also been increased, and there is now a night nurse and a night probationer on every flat in the building. When Miss Ramsden leaves the Infirmary this month, every one will be sorry, and the nursing staff most of all.

THE COOK BATHING PATIENTS.

At the last meeting of the Torrington Guardians allusion was made to a statement that the late nurse at the workhouse had ordered the cook to bathe a patient admitted to the infirmary, and that friction had arisen in consequence. The cook, being called before the Guardians, said that she objected to being ordered by the nurse, but that "immediately the matron asked her to bathe the patient in question she did so, and would continue to do so." The cook did right to obey the instructions of a superior official, but the arrangements for the sick must be of a promiscuous character at Torrington, where the duty of washing the patients becomes one of the functions of the cook.

THE ABOLITION OF PREMIUMS AT ADDENBROOKE'S HOSPITAL.

AGAINST the fact that the permanent expenditure at Addenbrooke's Hospital, Cambridge, as shown by the annual report, has been considerably enhanced by the re-arrangements which have been made in the nursing department under the auspices of the present matron, must be set the gain to the efficiency of the staff in consequence of the abandonment of premiums. Since it was decided not to require probationers to pay premiums, and to give them salaries as well as materials for indoor uniform, the matron has had an immense increase of applicants for training. This means that her choice of selection is no longer limited, and that the institution has the choice of the best class of probationers. Moreover, it has now ceased to be necessary to hire special nurses, and in this particular a sub-

stantial reduction in expenditure has been secured. In the end the change must be entirely for the benefit of Addenbrooke's Hospital.

BAD POLICY AT EDMONTON.

THE Edmonton Guardians have determined to adhere to their decision not to appoint an assistant medical officer, although the Local Government Board have intimated to them that "it is essential that in an institution where there are so many acute cases, as is shown particularly by the rapidly increasing number of operations under anaesthetics, there should be a medical officer, or an assistant, devoting his whole time to the duties of his office." While the new infirmary is being built the Local Government Board do not press that the officer shall be resident on the workhouse premises, so long as he can be quickly summoned when his services were required. But in spite of this concession, and although the chairman, at the meeting last week, stated that the number of operations is now 190 as against 30 per annum three years ago, the Guardians, by a majority of three, persist in taking a course which must seriously militate against the welfare of the patients, and also against the institution attracting the class of probationers most likely to reflect credit on it.

FEVER TRAINING IN IRELAND.

A CONTROVERSY has arisen between the Lurgan Guardians and the Irish Local Government Board. The latter insist that a minimum of six months' fever training is essential to nurses who seek to qualify for the post of charge nurse at a fever hospital; while the former maintain that with three years' general training, four months and a half in a fever hospital ought to be accepted as sufficient training. In this opinion the Lurgan Guardians are supported by their medical officer, who, in a letter he has written on the subject, says that fever nursing "is not a speciality," and that "a good medical nurse can nurse fever as well as other diseases." There is some force in his contention, but it is now generally admitted that fever training is necessary to nurses who desire to hold a responsible post in an isolation hospital; and therefore we think that the period of six months which the Irish Local Government Board desire to enforce is reasonable.

POOR-LAW NURSING IN SCOTLAND.

THE Scottish Local Government Board have issued a memorandum for the guidance of medical officers of poorhouses in which probationers are trained, that should be studied by the authorities of the English Board at Whitehall. Its great recommendations are that it insists upon an examination of every applicant for the post of probationer by a special officer employed by the Board for that purpose; and that it stipulates for a course of three years' training on the lines of the best general hospitals for every probationer admitted. The Board will continue on their register the names of those nurses who qualified in the past by two years of training in a hospital in which there is a resident medical officer, and these will not be affected by the examinations of new probationers held at the

expiration of three years' training. But the valued parchment certificates will only be granted to those nurses who pass this examination; and it is significantly added that "it is expected that all nurses in parochial service will endeavour to obtain this certificate."

TRAINED MIDWIVES AND THE RATE OF MORTALITY.

In the report of the Sussex County Nursing Association there are many figures which tend to indicate that admirable progress is being made, and there is one fact mentioned which cannot be too widely known. The rate of mortality of infants under 12 months old is lower in Sussex than in any other country in England, and this fact the medical officer of health for the Eastern division attributes to the large proportion of trained midwives—a proportion which is due, he maintains, to the influence of the County Association. It may be hoped that similar beneficent influence will be exercised, with equally good results, by other county nursing organisations.

THE NEW HOSPITAL AT DUSSELDORF.

In the new hospital which is being erected at Dusseldorf the most modern system of training will be provided for the probationers, and with the medical school and laboratories attached, the would-be German nurse will here find opportunities which have not before been available in the Fatherland for thoroughly learning her work. The hospital itself will contain about a thousand beds, and will include blocks devoted to special diseases, thus allowing for a very detailed system of specialisation, which is always important to nurses. The main administrative block is an imposing stone building, containing quarters for both the medical and nursing staff, separate floors being assigned to each. The whole institution will cover an area of 35 acres, and is enclosed in spacious grounds which will be elaborately laid out, fine shady walks and sparkling fountains being included in the scheme. Every building is to be surrounded by trees and shrubs, and the administrative block will have its own special garden.

FIRE AT AN ISOLATION HOSPITAL.

AN outbreak of fire on Saturday night at the Enfield and Edmonton Joint Isolation Hospital, Winchmore Hill, served to show the presence of mind of both matron and nurse. There were twenty little occupants of two wards in the temporary children's block, ranging in age from three months to eight years—scarlet fever convalescents, who were being looked after by two night nurses. One of the latter, upon going into the bathroom in a corner of the building discovered that it was ablaze. She promptly closed the door, so that the draught should not fan the flames, and also in order to prevent unnecessary alarm in the ward. Then she threw up the window and blew the fire whistle. Having thus summoned assistance, she proceeded to remove the patients to another block, in which work she was speedily assisted by the other nurses, whilst the matron, who on hearing the fire whistle rushed from her bedroom, fixing the hose and the

hydrant, played on the burning building until the arrival of the fire brigade. The ward where the fire originated was completely destroyed, but, thanks to the efforts of the staff, male as well as female, no one received any injury.

THE JUBILEE MEETING OF A FAMOUS INSTITUTION.

The Bishop of London will speak at the Jubilee Meeting of the London Biblewomen and Nurses' Mission, which is to take place in the Caxton Hall, Westminster, on Tuesday, February 19, at 3 P.M. The other speakers will include Professor Clifford Allbutt and Canon Walpole, as well as the Earl of Harrowby who is to preside. The excellent work done by the large staff of nurses attached to the Mission is well known to our readers, who are also aware that a high standard of nursing is maintained. We have no doubt that the proceedings at the Jubilee meeting will demonstrate the fact that the movement was never better appreciated than it is to-day, because, unlike some organisations, it has kept pace with the times, it has been admirably managed, and there has always been associated with its workers the spirit of enthusiasm which does so much to keep alive the interest of the community.

A START AT QUETTA.

THE Quetta branch of the new Indian Nursing Association was opened last month with two nurses, and thanks, in a great measure, to the efforts of the wife of the officer commanding the Royal Engineers, every possible provision has been made for the comfort and convenience of the staff in the Nurses' Home.

THE NURSES' CO-OPERATION.

THE ordinary general meeting of the members of the Nurses' Co-operation will be held at 8 New Cavendish Street on Tuesday next at 5.30 P.M. The business will include the election to two vacancies on the Committee of Management.

DANCES AND DISTRICT NURSING.

A FANCY-DRESS DANCE at the Town Hall, Woking, last month on behalf of the Woking and District Benefit Nursing Association realised £55 15s., all expenses being paid by the Committee of ladies who organised the dance. This is satisfactory enough, but at Cardiff, where a ball was recently held on behalf of the Nurses' Institute, the very large sum of £414 16s. 6d. has been handed over to the authorities of that organisation. No fewer than 616 persons paid for tickets for the entertainment, and but for a heavy charge for the City Hall, the proceeds would have been nearly £450.

SHORT ITEMS.

AN institution has lately been opened at Tunbridge Wells for the study of child life. The full course covers a year, and consists of lectures on physiology, hygiene, nursing, first-aid, child nature, and kindred subjects, together with practical work in the nursery, kitchen, and laundry.—Miss M. Barnett has resigned her post as charge nurse at Sculcoates Union Infirmary in consequence of her marriage.

The Nursing Outlook.

"From magnanimity, all fears above;
From nobler recompense, above applause.
Which owes to man's short outlook all its charm."

MIDWIFERY IN NEW YORK.

In the year 1905, the number of births attended by midwives in New York numbered 43,834; or 42 per cent. of the total births in the city and its suburbs. This shows that the midwife has a strong hold on the great American city, and gives a special interest to Miss Elizabeth Crowell's investigation of the numbers and training of the midwives thus employed. If New York were a purely American city the midwife would be neither such a frequent nor such an important phenomenon. But it is the port of landing, and very often the permanent home, of a large number of foreign immigrants, the women of whom preserve their old-world liking for the attendance of one of their own sex in their hour of pain and danger. Thus it comes about that of the 500 midwives visited by Miss Crowell (who is assistant secretary of the New York branch of the Public Health Defence League) the great majority were of foreign birth. Austria-Hungary was responsible for 27 per cent.; Italy for 25 per cent.; Germany for 22 per cent., while only 4 per cent. were born in the United States, and the remaining 8 per cent. represented England, Ireland, Scotland, France, Sweden, Switzerland, Syria, Turkey, Holland, Belgium, Denmark, Buenos Ayres, and the West Indies—truly a cosmopolitan collection!

Strange to say Miss Crowell gives the preference among the midwives she has visited to those who have had foreign diplomas. It would hardly be possible to speak in more scathing terms of the American midwifery diploma than she does. Out of the five hundred with whom she deals, "forty-three per cent. held diplomas from so-called schools of midwifery in this country—with two exceptions, schools conducted here in New York city—or certificates from physicians who for considerations best known to themselves, have in many instances seen fit to certify to the proficiency of ignorant, incompetent women desiring to practise midwifery." Again:—"The diplomas of these New York schools are utterly worthless as evidence of training or efficiency on the part of the midwife holding them. In some cases I found that they had been granted to women who were unable to read or write, but who had had the price—66 dollars. There are four such schools in this city." Against these American diploma-ed (we will not say trained) midwives may be set a Russian woman, trained and educated, who had attended between four and five thousand cases, whose husband and son were both physicians, and

who could boast, and obtain from both willing confirmation of her claim, that, in the matter of obstetrics, she had taught them all they knew. This woman unfortunately is an exception among midwives, and while she gives the palm to foreigners in the matter of training, Miss Crowell says that of all the 500 of whom she speaks, not more than 10 per cent. could be regarded as capable and reliable.

In face of this statement it is rather alarming to hear that three-fifths of the total number were quite ready to deal with abnormal cases, and never thought of calling in a physician until they found themselves entirely unable to cope with the situation. All of them claimed that they used antiseptics, but Miss Crowell shrewdly says that this claim means very little when the midwife is dirty, her bag filthy, and her general appearance suggests that she is ignorant and incompetent. "As for bags and their equipment," says Miss Crowell, "from a professional standpoint by far the greater number would make fit decorations for a chamber of horrors. Rusty scissors, dirty string, a bit of cotton, a few corrosive sublimate tablets, old rags and papers, some ergot and vaseline, a gum (i.e. rubber) catheter, wired, were the usual contents." This insanitary *vade mecum* did not always mean that the midwife had no knowledge of better things, but only that she had learned since she came to America that slovenly methods would pass. Miss Crowell says that foreign midwives who brought out only the usual dirty bag for inspection, had often stowed away "a most complete, compact, convenient portable sterilizer, which they had purchased at home and which the law there had compelled them to use." But in America:—"It is not necessary, nobody cares what we use," was the explanation, when any of them was asked why the good methods were neglected.

It is to be expected that such women should be careless about their work. In the important matter of the care of the eyes of newborn children, the majority of the midwives stated that they used borax or boric acid, and a few used the nitrate of silver solution recommended by the Board of Health. Miss Crowell speaks gravely of midwives who are guilty of criminal practices, and she declares that the machinery of the criminal law is utterly ineffectual in bringing women who so abuse their position to punishment. In fact she admits that the class of women who take up the work is low, and says, "that there is a certain stigma attached to the title 'midwife' must be granted." It should be the duty of all women, midwives, nurses, and laity, to get rid of the stigma thus attached to an ancient, honourable, and important profession, by insisting on a high standard of professional skill and personal character.

The Care and Nursing of the Insane.

By PERCY J. BAILY, M.B., C.M.Edin., Medical Superintendent of Hanwell Asylum.

II.—NURSING THE SICK.

(Continued from page 233.)

3. The Skin.

Ointments.—The absorbent powers of the skin are very small so long as the cuticle is intact. It is nevertheless possible to introduce some drugs into the blood by this means, especially in babies, whose cuticle is delicate and thin. The method of administration is called inunction, the drug being mixed in a greasy vehicle forming an ointment. The ointment is to be carefully rubbed into the skin, which should previously be well washed with soap and water and dried. The parts that are usually chosen for the inunction are the inner side of the thighs or arms, the sides of the chest, and the abdomen. In newly-born infants it is often sufficient to spread the ointment on a piece of lint and bandage this to the child's body. Mercury and cod-liver oil are the drugs which are commonly administered in this way.

Various kinds of ointment are frequently used for their local effect in the treatment of skin diseases. These should, unless otherwise directed, be applied spread over pieces of lint.

Lotions are usually watery or spirituous solutions which are used solely for their local effect. Such lotions are applied by means of pieces of lint, which should be completely covered with a piece of gutta-percha tissue or jaconet to prevent evaporation. The jaconet should overlap the lint all round by about half an inch at least, and should then be covered with a layer of cotton wool and fixed with a bandage. Some lotions are used for their cooling effect, and are called evaporating lotions. These should be applied by means of pieces of muslin, which should be kept constantly wet, and which, since evaporation is now desired, must not, of course, be covered by anything.

Liniments are more powerful preparations than lotions, and are often more or less soapy so as to facilitate their application. They are nearly always ordered to be rubbed into the part. Their object is usually to soothe some deep-seated pain.

Counter-irritants.—Drugs which have a local irritating effect are sometimes applied to the skin in order to produce dilatation of the superficial blood-vessels. Some of these are sufficiently powerful to cause blisters or even pustules. They relieve congestion of the deeper tissues, and thus may diminish deep-seated pain. Mustard plasters or mustard leaves, tincture or liniment of iodine, cantharides, etc. are examples of counter-irritants.

Hypodermic Injection.—By far the quickest and surest way of introducing drugs into the blood is by hypodermic injection. The drug, in solution, is introduced beneath the skin by means of a hollow needle and a syringe. The dose must necessarily be small—usually about five minims or drops. The barrel of the syringe or stem of the piston is marked off so as to enable the amount of the dose to be accurately measured. The syringe and needle must be kept absolutely clean, and it is now possible to

obtain these instruments made entirely of metal, so that they may be boiled to render them aseptic. Except when in use, a silver wire should be kept in the lumen of the needle—when the syringe is about to be used rather more of the solution of the drug than is required for the dose is drawn up into the barrel. The silver wire is then removed from the needle, and the latter fixed to the nozzle of the barrel. The syringe, while being held with the needle pointing upwards, should then be gently but firmly tapped with the finger in order to loosen any air bubbles that might cling to the inside of the barrel. The piston is then pushed up until some of the fluid is driven out of the needle and only the required dose remains. A portion of the patient's skin, which should have been previously rendered aseptic in the manner to be subsequently described, is then picked up between the thumb and finger of the left hand, and the point of the needle driven firmly but quietly into the raised fold. The piston is then slowly pushed up until the syringe is emptied, the needle being partially withdrawn during this part of the operation. As soon as the barrel is quite empty the needle is entirely withdrawn, and the point of the finger placed over the spot from which it has come, to prevent the escape of the fluid, which becomes absorbed by the lymphatics in the space of a few seconds. In selecting the spot for the injection, care must be taken to avoid any vein which may be seen beneath the skin—with this reservation it is immaterial where the injection is made. The arms are the most convenient places, but it should be remembered that the marks left by the needle may be permanent, and therefore in women, who might be likely to wear short sleeves, some other part, such as the back or the outer side of the thigh, should be chosen.

This method of medication is only to be used when the drug is required to take rapid effect to relieve pain or to induce sleep or to soothe the last hours of the patient when he is becoming exhausted in various incurable and painful conditions, such as cancer. In asylums this operation is only rarely entrusted to the nurse, but she should be familiar with it so that she may in an emergency be capable of carrying it out. Morphia is the drug that is most commonly used by this method, but there are many others which it may be convenient to administer in this way.

The Bowel.

The bowel is often made the recipient not only of various medicinal agents, but also of nutriment. Such preparations may be either solid or liquid. When solid they are termed suppositories; when liquid, enemas. A suppository is a small cone-shaped solid body usually about $\frac{3}{4}$ inch long, which is made of a vegetable fat called cocoa butter. This at the ordinary temperature of the air is hard and easily retains its shape, but melts at the normal temperature of the body. The drug—most commonly morphia—which it is intended to introduce into the bowel is incorporated with the cocoa butter.

When a suppository is about to be administered the patient should lie upon his left side, with the knees drawn up and the buttocks near the edge of the bed. The suppository is then dipped in oil and is pushed, point first, through the anal orifice by the nurse. It must be followed up by the finger until it is well beyond the muscular fibres of the anal sphincter to ensure its being retained in the rectum. When the

lower bowel is in an irritable state, as in cases of dysentery, etc., there is a tendency for the suppository to be ejected before it has time to melt. When this is the case a warmed towel should be placed over the anal orifice and perineum of the patient, and held there for two or three minutes, by which time this tendency will have been overcome.

(To be continued.)

The Nurses' Clinic.

THE CLOTHING OF HOSPITAL PATIENTS.

We all know the clothing in which the average patient is admitted to the ward—the countless petticoats of thinnest possible flannelette in the case of women and children, all fastened with pins instead of buttons; the grimy chemise and drawers; the greasy, broken stays; the much-worn dress; while the men usually have a dirty vest and pair of cotton pants, a more or less patched shirt, and sometimes a belt, as well as coat and trousers. We know these garments well, and treat them with all possible despatch, relegating them to the pigeon-hole, the patient's friends, or the disinfecting-oven, according to their degree of unwholesomeness.

The women also love wearing shawls, and will often resort to much artifice in order to retain one in their possession. These again are abhorred, and rightly so by the nurse, who summarily disposes of them, regardless of discontented looks and murmurs about "catchin' one's death o' cold."

To provide clothing for such a patient to her own satisfaction as well as the nurse's, more tact is needed than is always displayed, and not only tact, but kind common sense and knowledge of what is necessary for the particular case under her care. To the modern hospital nurse, educated to love fresh air, who wears suitable clothing, and is healthy and well fed, open windows are an exhilaration and a vital necessity, and she sometimes fails to recognise how the poor, diseased, ill-nourished specimen of humanity, shivering in her clean bed after the initial bath, abhors a draught as nature abhors a vacuum, and worships that filthy "chest-protector," vest, or shawl as a fetish to shield her from the dreaded bronchitis or pneumonia. "A poor thing but my own" is the thought that finds expression in the clinging regard shown towards these inadequate garments, so, in replacing them by others, a nurse should be careful to supply some equally warm and quite as comfortable, remembering that a thin cotton or greatly worn flannelette night-dress or shirt cannot really feel the same as that old vest, dirty though it might have been.

Badly fed people are more sensitive to cold than those whose diet is always liberal, so that it is worth while to show some consideration for the complaint of chilliness, and not dismiss it with a careless "Oh, you will soon get warm; it isn't really a bit cold to-day."

A vest taken off a patient should always be replaced by another, and if the night-dress is thin add a warm bed-jacket and put an old blanket next the patient under the top sheet for a few hours, also a hot bottle to his feet. If a nightgown which is open at the back has to be worn for some time, owing to an abdominal operation or for any other reason, a nurse sometimes forgets to change it for one of the ordinary pattern when the patient begins to sit up in bed, with the result that a considerable portion of the back is left without covering, thus affording ample opportunity for a dangerous chill. The same thing may happen when a patient is turned over on her side, if care is not taken

to put a pillow at the back and to tuck a blanket between it and the shoulders.

Unless it is very hot summer weather, a jacket or cape should be worn when sitting up in bed; it is a good plan to have a separate one for the day, changing it at night for one of thinner material.

With convalescents who are able to get about the ward, the mistake is often made of allowing them to go too thinly clad. In the case of men this is particularly so. The first time they are got up on to the couch for half an hour they are often loaded with blankets and rugs, so that they can scarcely move a limb; but as soon as they can walk about they are allowed to do so wearing only a ward dressing-gown over their shirt and a pair of slippers. I have even seen the socks or stockings omitted. As men cannot supplement their attire by petticoats as women patients do, it is most necessary that they should wear trousers or pants whenever they are able to walk about, and it is absolutely essential that the feet and legs should be warmly and adequately covered. Many an unexplained relapse during convalescence is undoubtedly due to a chill contracted in this manner, especially among children or lads too young or too thoughtless to complain of feeling cold.

If the patient is placed in an easy chair for the first time of getting up, a rug should be spread over the seat in such a manner that it will reach quite to his heels, so that it can be easily wrapped round his knees as he sits down, and preclude any possibility of a draught chilling the back of his legs. The chair, too, should not be in a direct current of air, nor face too strong a light. If on a ward balcony it ought not to be just opposite the door leading into the ward, or a draught will be felt. The eyes must be protected from the sun by a light shady hat or an umbrella. If in a ward the chair should not be too near the fire. Warm list or felt slippers are best for ward wear, with woollen socks or stockings. There ought to be also a good supply of woollen or flannel vests for every ward, and if not provided by the hospital an energetic sister or nurse can generally interest her own friends in her work sufficiently to get them made for her, doubtless as a free gift.

Where there are grounds attached to the hospital, patients should be made to put on boots before going out to walk, in case of getting damp feet, also for economic reasons connected with the ward slippers.

To Nurses.

We invite contributions from any of our readers, and shall be glad to pay for "Notes on News from the Nursing World," "Incidents in a Nurse's Life," or for articles describing nursing experiences at home or abroad dealing with any nursing question from an original point of view, according to length. The minimum payment is 5s. Contributions on topical subjects are specially welcome. Notices of appointments, letters, entertainments, presentations, and deaths are not paid for, but we are always glad to receive them. All rejected manuscripts are returned in due course, and all payments for manuscripts used are made as early as possible after the beginning of each quarter.

Illustrations of the Life of a Modern Nurse.



PREPARING FOR AN OPERATION.

THE THEATRE AT KENSINGTON POOR LAW INFIRMARY.

Incidents in a Nurse's Life.

MY FIRST NIGHT IN A CHILDREN'S HOSPITAL.

I COMMENCED training in a children's hospital, and in due course was put on night duty. I had charge of the girls' ward, with fifteen patients, ranging from 10 weeks to 12 years old, each more or less interesting in her own way.

As the lights were to be kept low in the ward, I found myself installed in a little day-room adjoining, with a basket of socks to mend in the intervals, when the children did not want attention. Rather sleepy work, I thought, for the middle of the night. However, the little patients did not give me the chance of going to sleep. No doubt, too, being my first night on duty, I was over-anxious, and when day came I am afraid the matron did not find the pile of unmended socks much reduced.

I was given a book in which I was to keep a record of what sort of night each of the children passed; especially was I to notice if any of the hip children cried out in their sleep. I had just settled down to my first sock when suddenly, through the silence of the ward, a sharp cry rang out, familiar to all who have nursed children with hip disease. The question was, which child had cried? I threw down my work, and ran into the ward, but, alas! all was still and quiet. This happened once or twice during the night, and I was obliged to confess, with shame, in the morning that I was unable to say which child had cried out. However, these difficulties are overcome by experience, and after the first week I knew directly whose voice it was which so weirdly broke the silence. It was now time to make the poultices and fomentations, which had to be applied, and the foods for those who had to be fed during the night. Three or four, happily, were so far advanced towards convalescence as to sleep fairly peacefully all through the night.

There was one poor little baby of ten weeks who, owing to bad feeding and mal-nutrition, did not look more than a fortnight old. She had to be fed constantly in small quantities, and, being too weak to suck, I had to administer the food with a syringe. This needed some skill, to choose the right moment, and to get the food down between the feeble

wails, or I might have choked the poor mite, instead of nourishing her.

After all had been arranged comfortably, and I had had my own early morning meal, I once more settled down to that pile of socks, which laid rather heavily on my conscience.

A quarter-of-an-hour, perhaps, passed away, when, clang, clang, went the front-door bell. "Certainly," I thought, "night duty cannot be called dull work." I knew what that peremptory summons meant—an accident of some sort, and a pretty serious one to be brought in the middle of the night. The nurse in the downstairs ward would, I knew, go to the door, but I listened anxiously. If it were a girl she would come up to my one empty bed. Presently I heard my name called, and ran down, to be told that a little girl was being carried in from a house in the neighbourhood, which was on fire. This news had been brought by one of the ready messengers, always to be found at such times. I ran upstairs again as fast as I could, wondering how much the poor little soul was burnt. First I went to tell matron (she always had to be awakened in case of any emergency, as we nurses were all young), then back to the ward to get all in readiness for the reception of my new patient.

Matron arrived just as the men were carrying the poor little girl upstairs, and we were soon busy, doing all we could for her comfort. We saw at once that she was very badly burned, and the chance of her recovering was small.

As it was now between four and five o'clock matron elected to sit up herself and watch the child rather than call out one of the day nurses, for I should soon have the breakfasts, and early morning work to do, and could not possibly give the poor child enough attention. If she could only be tided over the time of collapse resulting from the shock we might pull her through, matron said. The noise of the new arrival had roused many of the little patients and they all had to be soothed and settled off again.

In a few hours time all the work of the busy early morning hours was done, and I retired, thinking I should not soon forget my first night, and wondering if I should find my poor little new patient still alive when I came on duty again.

The Consumptive at Home.

AN ALTERNATIVE TO SANATORIA TREATMENT.

THE prevention of tuberculosis by the simple method of carrying the patient away to a spot where he can no longer infect his family, is far easier in London than in rural districts. When the hospital and the convalescent home have done their part, and maybe failed to effect a cure, there is always open to the phthisical patient a last resort from the crowded London lodging in the shape of Poor-law Infirmary, and to an ever-increasing extent this resort is made use of by persons who would otherwise be a source of danger to the community. But "to go into the workhouse" has still in the country its old ominous sound, nor is the reluctance to resort to its hospitality always ill-founded. The following notes of a case recently dealt with may serve to illustrate some of the difficulties which exist with regard to tuberculosis in country districts, together with a suggestion for their remedy.

The patient is a young man not yet twenty years old. He is the third child in a family of eleven children, all of whom except the eldest daughter, in service, inhabit a cottage containing four rooms. The father is in regular work at 25s. a week, and the eldest son is also at work, but the

remainder of the family are young children. Reginald was himself employed at some engineering works about two miles from his home when he contracted influenza, neglected it till pneumonia supervened, and was finally taken to the County Hospital, from which he was discharged after many weeks with both lungs seriously affected. With the help of some friends he was sent to the West of England Convalescent Home at Weston-super-Mare, and there remained until the approach of winter. By good fortune a free bed was then secured for him at St. Catherine's Home at Ventnor. And from Ventnor he returned, in late April 1905, almost cured. The medical report stated that the disease was quiescent, and it was hoped that he would soon be fit for some light employment. Meantime, as his home was situated on high ground on a spur of the Chilterns, it was thought that he could do very well there for a time. There was, in fact, nowhere else for him to go. Alas, he returned to sleep in the same bed with his brother, in a tiny room with the smallest possible aperture for a window, and from the first day he began to travel downhill. A room was rented and furnished for him next

THE CONSUMPTIVE AT HOME—*continued.*

door, but the window was again about two feet square, and only half of it was made to open. A summer spent sleeping in this way and wandering restlessly about all day, when he was not sitting in the stuffy kitchen among a crowd of little brothers and sisters, reduced poor Reginald to a deplorable condition. All the skill, money, and care freely expended in the endeavour to restore him, were easily neutralised within a few weeks, and this in air reputed the best to be found in England. A suggestion that Reginald should be accommodated in an open shed in the adjoining field, was indignantly repudiated by his sorrowing relatives. They would resign themselves to the death of their favourite son, if it were the will of God, but to have him lying out in a field, exposed to the damp and dangerous airs of night, was too much to expect. Finally a great effort was made on his behalf, the head of an Open-air Sanatorium within six miles of his home generously promising to receive him for the winter if sufficient money were forthcoming to defray the expense of his food. And so from October till the end of May he lived out of doors in a chalet, just holding his own, with all that the highest skill could do for him. During all this time his relations were allowed to visit him, and slowly, through the zeal of the patient, who never wavered in his allegiance to the system on which he knew his life to depend, they came to understand. When the time came for his return once more to his home, both he and they eagerly adopted the old suggestion that it should be a return to life in the open air, modelled as far as possible on the sanatorium. Once more an effort was made, and this time with some hope of making permanent provision for the sick lad. An excellent site was found in the cottage garden, sloping down towards the south and surrounded with grass land. Here a shed of the roughest description has been erected, with corrugated iron roof lined with felt. It is twelve feet square; on three sides are windows four feet square, made to open top or bottom as required, and on the fourth side is the door. Here, then, the consumptive is happily established, the wonder and admiration of a simple population in the hamlets around, who have learned all their lives through to regard fresh air as the one deadly enemy always at hand to bring them to destruction. The conditions under which he lives are as nearly perfect as could

be devised for one in his state, and since his return it is a fact that his health has undergone a striking improvement. The chart of his temperature, which he keeps with religious accuracy, is shown occasionally to nurse and doctor, but there is small need at present for the attendance of either.

Now the cost of the shed was £8, and the cost of the winter spent in the sanatorium was £18. The money spent altogether over this one patient, taking the cost of his hospital treatment and the various homes together, cannot have been much under £70.

Why should it not be possible to organise a system for providing phthisical patients with the means to continue the open-air life they learn to value in sanatoriums after their return home? To attempt to enforce the treatment before the patient has practised it under discipline and learned its life-giving properties can but result in failure. Yet almost every country cottage, however overcrowded, offers facilities for erecting a shelter in its vicinity where the consumptive can get the element he needs, and, what is almost as important, be removed from the danger of infecting others of his family. And when once the lesson has been learned, no reluctance will be shown in practising it.

It is hardly to be supposed that the family will in any case have sufficient initiative to carry out the arrangements unaided. But it might, we think, well be a part of sanatorium treatment to insist on the provision of some means for carrying on the system at home when the patient is discharged.

The chronic consumptive, sowing widespread the seeds of his disease, is to be found in every hamlet in England. To found sufficient homes to hold them all is beyond the utmost stretch of charity. But every patient established in his own home, among his own people, under open-air conditions, is much more than "a hopeful case." He is an object-lesson, to all his numerous visitors, of the benefits of fresh air; and his scorn of draughts, his amusement at the condolences poured upon him, and his scraps of well-remembered lore from the sanatorium, make an even greater impression than all the excellent maxims of the district nurse herself.

A Case of Nervous Breakdown.

SHE was called Nurse Elizabeth in the nursing home, but to one patient she was Saint Elizabeth from the first day. It is possible that the outward observer might see in her nothing beyond a sensible, earnest-minded, capable woman; for helplessness alone can draw out her strength and boundless sympathy. And even those who know her well would be puzzled to define wherein lay her charm, or why she succeeds where others fail.

Unless it is that beyond her quick perception and true mother's instinct she has a heart that has learnt through suffering and personal loss to sympathise with and understand another's need.

The case she undertook was briefly that of a worn-out selfish, miserable, hopeless woman, full of imaginary diseases, with a mind so perverted as to be almost incapable of even wishing to be herself again. She had lost nearly two stone in weight and was unable to eat or sleep, or to get rid of the idea that she was a hopeless invalid.

Add to all this a pulse that raced feebly around 130, an adoring husband spoiling her at every turn, anxious friends giving in to every absurd whim, add also the opinion of a well-known London specialist: "almost the worst case

I have seen yet," and it will be seen that Nurse Elizabeth did not succeed because circumstances were easy.

In the four months' conflict with this ill-balanced brain she aimed from the very first at nothing less than a complete recovery, which, judging entirely from her own observations, she pronounced possible.

This belief she gradually managed to convey to her patient's mind, first by inspiring a longing to be well and then by the force of her own conviction imparting the possibility. Nothing ever appeared to discourage her, through weeks of sleeplessness she still maintained its temporary character.

A hundred times over she must have patiently reasoned through the long nights "Don't toss about from side to side like that—you can lie still if you want to. Now don't try to go to sleep. Just lie still and think of the happiest day in your life. It doesn't matter if you sleep or not." This unimportance was the right line to work on, and the metallic tones of the other nurse repeating at intervals "If you won't go to sleep you will lose your reason directly," soon ceased to haunt or worry, and the conjured-up visions of an asylum gradually melted away from the patient's re-

membrane. It was the same with food; she did not bring it in with an expression of "Here it is, and I am going to stand here till it is eaten." Carefully she explained the reason of each order, and successfully dealt with every objection, inspiring with each word a growing desire in her patient's heart to consume all available food and ask for more.

She never talked very much, and when she told about outside things it was of the country, the sea, and the moors that she spoke. Or perhaps it would be a story of a little baby she had nursed and loved, but nothing ever that was long or prosy, and, by the time the happy ending of its mother's joy at her child's recovery was reached a dreaded meal would unconsciously have had a satisfactory conclusion too.

Once coming in with a bunch of heather and an amusing experience with a little nursemaid to relate she stopped suddenly.

"Why, what is the matter? Have you developed a new disease since yesterday? It was a tumour then, wasn't it? and appendicitis the day before and pleurisy the day before that? Well, what is it to-day?"

A sigh was the only answer at first, then, after a due amount of pressure—for Nurse Elizabeth believes in finding out the cause before attempting to remove it—she extracted the information that "Matron and nurse had been talking outside the door that morning and nurse had said she was 'tired of such a spoilt woman'; and Matron said 'she would never be any better, so Nurse Elizabeth needn't think so'—I know it was me they meant, and (beginning to weep) I can't live and be like this always."

There was a long pause before Nurse Elizabeth began to answer, then quietly and sensibly, she went over the old ground, pointing out improvements, comparing the present with the past, and painting the future with glowing colours, ending up with a smile that took every bit of hardness out of the usual ending: "But you know it depends upon yourself, and you will only get out of this just what you put into it."

It was not once or twice she had to reason so, but daily, sometimes almost hourly. This overheard conversation was possibly imaginary—and Nurse Elizabeth knew it—but it made no difference to her invariable patience. It was real to the invalid and must be dealt with accordingly.

One day stands out from all the others, it happened after the treatment had been continued about a month.

The doctor, who had hitherto been anything but encouraging, suddenly turned to her with a beaming face—"You've done splendidly, nurse," he said, enthusiastically—"splendidly; I only wish I had seven other nurses just like you this moment."

Nurse Elizabeth did not smile at the praise to herself, but kept it for afterwards, when she said to her patient: "You see, I knew you could do it, if you really meant to."

This was the first recognised advance towards recovery, but perhaps the next three months of semi-convalescence were more trying.

She had to put up with days together of unreasonable bad temper and long fits of sulky silence. Of these she would take no apparent notice, though indirectly she was making every effort to help her patient to conquer the demon of depression. Then, when at length cheerfulness was restored, without a reference of any kind to the cross and ungrateful words, she would heap coals of fire upon the offender's head by extra consideration and gentleness. She chose a bright sunny morning when it felt good to be alive to make her few remarks upon giving way to depression. "That is all," she ended up with, "and I don't think now you are so well you will ever do it again." And so through all the ups and downs she remained always the same ever kind and

sympathising friend, ever appealing to all that was good in others, never thinking of herself. Truly "a heart at leisure from itself, to sooth and sympathise."

Slowly but surely the end so longed for was reached, and one day a strong, healthy girl might have been seen at Victoria Station, looking longingly as the train moved away, at a face framed in an ordinary blue bonnet, leaning out of the carriage window, as through a mist of tears she saw the last of the woman whom she had grown to regard almost as a saint.

Late that night, sitting over the fire, my husband said to me, "So you liked nurse all the time?" "Liked her?"—I answered, "I think I shall always love her, for no one could believe how good she has been to me."

"Yes," he said almost reverently; "I think your name for her was the right one. I hope I shall never forget to be grateful to her for bringing me back my little wife just like she used to be."

The rest of what he said does not matter here, as it had no further reference to SAINT ELIZABETH.

Queen Alexandra's Imperial Military Nursing Service.

POSTINGS AND TRANSFERS.—Miss M. L. Harris, sister in Queen Alexandra's Imperial Military Nursing Service, has been transferred to the Military Hospital, Devonport, from trooping duty, s.s. "Plassy"; Miss E. H. Hordley to the Military Hospital, Portsmouth, from South Africa; Miss K. Pearce to the Military Hospital, Pretoria, from the Military Hospital, Standerton; and Miss A. A. Wilson to the Military Hospital, Middelburg, Cape Colony, from the Military Hospital, Wynberg. Miss E. G. Barrett, staff nurse, has been transferred to the Queen Alexandra Military Hospital, Millbank, London, from the Military Hospital, Portsmouth; Miss K. Rescoe to Egypt, from the Royal Victoria Hospital, Netley; and Miss H. M. E. Macartney to Egypt, from the Royal Herbert Hospital, Woolwich.

Queen Victoria's Jubilee Institute for Nurses.

THE QUEEN has been graciously pleased to approve the appointment of the following to be "Queen's Nurses," to date January 1, 1907.

ENGLAND AND WALES.—Amelia Annie Alder and Bertha Cobden Hosking, district training at St. Olave's; Margaret Hannah Bevis, Birmingham (Newhall Street); Marie Evelyn Crouch, Blackburn; Grace Addenbrooke, Sarah, Ellen Lebart, Fanny Sims, and Florence Mabel Stead, Metropolitan Nursing Association; Emmeline Denby and Isabella Randall, Brighton; Grace Edith Burgess, Camberwell; Margaret Mary Crowe and Mary Stephenson, Cardiff; Katharine Maude Bladen, superintendent at Cheltenham at date of affiliation; Marie Amelia Stuart Edwards, Ada Josephine Godby, Emma Jane Hall, Kate Emma Gertrude Taylor, Emma Anita Mary Walters, Mary Ann Wilkinson, and Elizabeth Williams, working at Cheltenham at date of affiliation; Kate Annie Cooper and Laura Frances Touch, East London (Southern Division); Jennie Duffy, East London (Stepney Division); Ada Powell, Gloucester; Elizabeth Moorhouse Barlow, Hull; Lindora Louise Eskell and Mabel Thorp, Kensington; Florence Amelia Gibbons, Leeds (Holbeck Home); Ruth Oates and Mary Elizabeth Saunders, Liverpool (Central Home); Gwen Lewis-Jones, Liverpool (Derby Lane); Hilda Elsworth and Emily

Richardson, Liverpool (Overton Street); Ada Duckworth, Liverpool (Shaw Street); Hannah Harrison, Liverpool (North Home); Alice Mary Gertrude Ferguson, Manchester (Hulme Home); Mary Jane Halkett, Maud Mary Hughes, and Louisa Gwendoline Ogden, Portsmouth; Mary Evans, St. Helen's; Alice Mary Goodman and Emma Sutton, Salford; Mary Ellen Hughes and Grace Trotter, Shore-ditch; Elizabeth Mary Haynes, Southampton; Nora Vincent Stewart, Sunderland.

SCOTLAND.—Jane Douglas, training at Dundee; Margaret Walker Arnot, Elizabeth Fyfe Beck, Flora Cameron, Elizabeth Cox, Elizabeth Davidson, Mary Douglas, Beatrice Mary Harvey, Jessie Maclean, Agnes McGregor, Annie Smith McMillan, Agnes Mercer, and Catherine Cooper Trotter, Scottish District Training Home, Edinburgh.

IRELAND.—Gretta Coughlan, Lily Geatens, Ellie Hogan, and Ellen Kennelly, training at St. Lawrence's Home, Dublin; Adelaide McGibbon Campbell, St. Patrick's Home, Dublin.

TRANSFERS AND APPOINTMENTS.—Miss Helen Court has been appointed superintendent of Coventry District Nursing Association; Miss Annie Aldridge to Darlington; Miss Cornelia Bennett to Three Towns; Miss Mary A. Harrod to Highcliffe (temporarily); Miss Maude E. Jacocks to Heanor; Miss Jessie Kennett to Dartmouth; Miss Sarah Parry to Portmadoc; and Miss M. H. Spalding to Pontyclun. Miss N. Lloyd has been transferred to Wykeham from the Harpurhey Home, Manchester; and Miss Florence Moore to Orielton from Pontyclun.

Everybody's Opinion.

[Correspondence on all subjects is invited, but we cannot in any way be responsible for the opinions expressed by our correspondents. No communication can be entertained if the name and address of the correspondent are not given as a guarantee of good faith, but not necessarily for publication. All correspondents should write on one side of the paper only.]

A PROBATIONER LOSES HER SIGHT.

MR. MICHAEL J. TURNER, of 3 Comberton Road, Upper Clapton, N.E., writes: On behalf of my daughter, Nurse Helen Turner, I beg, through the medium of your columns, to thank "Anonymous" for the kind gift announced in your issue of January 26, and still more for the very evident and welcome sympathy that prompted the action.

"NURSE S. V. F." writes from Westminster Nurses' Home, 27 Queen Anne's Gate: As a very great friend of the probationer who lost her eye at the West Ham Infirmary I wish to express my feelings of gratitude to the anonymous donor of £5, and to say how greatly the feeling of sympathy and kindness thereby shown is appreciated by the sufferer and her friends. The girl loved the work, and the thoughts of being unfitted to continue in the profession was by far a greater worry to her than the loss of the eye. That she was appreciated by those she worked under is shown by the words of the ward sister under whom she was working. She said to me: "If there were more girls like Nurse T— in the nursing profession it would be a blessing, as she is the sort of girl wanted." Being strong and healthy and only twenty-three years old, and in a position in which it is absolutely necessary to gain a livelihood, one cannot but hope that she may succeed in some way in continuing in the work. It is uncertain as to whether the sight of the other eye will be satisfactory, as she is still under treatment at Moorfields Eye Hospital.

MIDWIVES' DEFENCE ASSOCIATION.

MISS LOUISE M. LEE writes, as secretary *pro tem.*: Will you allow me, through the medium of your columns, to call the attention of the midwives of London to the forma-

tion of a Defence Association by the midwives of the Royal Maternity Charity of London. We hope that other midwives not on the staff of the Charity may be induced to join us, so that the Association may be self-supporting. I shall be pleased to give any information to intending members. Letters may be addressed to the Secretary of the Midwives' Defence Association, 31 Finsbury Square, E.C.

WORKHOUSE NURSING.

"DESPERANDUM" writes: I was glad to see "Superintendent Nurse's" letter in your paper last week. I can fully endorse all she says; but, unlike her, I have given up the idea that I can ever live at peace in Poor-law institutions. I have held three posts as superintendent nurse. The last was worse than the other two. I had one night nurse for nearly 100 patients, and she was a woman well advanced in years and totally untrained, besides not being able to read or write, or, as I once heard a patient remark, "She can neither tell the time of clock by day or night nor the number on a reel of cotton." She was also intemperate. When medicines had to be administered at night I used to tie different-coloured cotton on the various patients. But I afterwards found that one of the patients was awakened invariably to read the names, as the nurse could not remember. I complained to the master and matron, to the doctor and to the guardians; but no notice was taken. When the Local Government Board inspector visited, he suggested various improvements. These were not carried out, and, when I asked why, I was told by the officials that inspectors were paid to make a fuss, but no one took any notice of what they said, and I should get used to it in time. However, I did not, and after spending nearly ten years of my life in Poor-law work—I was training for nearly five years at a large Poor-law infirmary—I have left it, I hope, for ever.

Appointments.

[No charge is made for announcements under this head, and we are always glad to receive and publish appointments. The information, to insure accuracy, should be sent from the nurses themselves, and we cannot undertake to correct official announcements which may happen to be inaccurate. It is essential that in all cases the school of training should be given.]

BASINGSTOKE UNION.—Miss Charlotte Alice Phipps has been appointed superintendent nurse. She was trained at the Royal Infirmary, Bristol, and has since been nurse at East Preston Union Infirmary and charge nurse at the Western Hospital, Fulham, London.

BIRKENHEAD UNION HOSPITAL AND INFIRMARY.—Miss Laura Beatrice Paul and Miss Madelaine Mary Graham have been appointed charge nurses. Miss Paul was trained at Farnham Poor-law Infirmary, and has since been charge nurse at Bolton Union Hospital. Miss Graham was trained at Toxteth Park Union Infirmary.

BROADSTONE JUBILEE HOSPITAL, GLASGOW.—Miss Minnie Templeton has been appointed matron. She was trained at the Glasgow Western Infirmary, and has since been sister at Greenock Infirmary.

FEVER HOSPITAL, BIRKENHEAD.—Miss Ethel Bentley has been appointed charge nurse. She was trained at Salford Union Infirmary, where she was afterwards sister. She has also been sister at the Heswall Sanatorium, Cheshire.

HOLBORN UNION WORKHOUSE.—Miss Janet Ray has been appointed charge nurse. She was trained at West Ham Infirmary, and has since been charge nurse at the Bridge School, Witham, Essex, and sister at the Lambeth Parish Schools, Elder Road, West Norwood.

JOINT HOSPITAL, BRIGHOUSE.—Miss E. Simpson has been appointed charge nurse. She was trained at Mill Road Infirmary, Liverpool, and has since been charge nurse at

The Hospital.

Nursing Section.

Contributions for this Section of "THE HOSPITAL" should be addressed to the EDITOR, "THE HOSPITAL"
NURSING SECTION, 28 & 29 Southampton Street, Strand, London, W.C.

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SATURDAY, FEBRUARY 9, 1907.

Notes on News from the Nursing World.

DISTRICT NURSES AND SPOTTED FEVER.

On another page will be found an account of the epidemic of spotted fever in Belfast, together with details of how it is nursed, and a concise description, by our correspondent, of the symptoms to be noted on the first appearance of the disease. The description is extremely valuable in view of the strong appeal of the Belfast Coroner at an inquest on Monday to parents to send for medical assistance the moment a child becomes ill. This, he stated, is the only means of stamping out this disease. We commend his remarks especially to district nurses, who, having read our contributor's article, will be in a position not to lose any time in notifying a case to the authorities, if they have even a suspicion that it is spotted fever.

ONE NIGHT NURSE FOR 62 PATIENTS.

THERE has been correspondence between the Local Government Board and the *Alcester Guardians* in reference to statements made by a former assistant nurse. They were set forth in a letter sent to us by the nurse, under the heading of "An Incident in a Poor-law Infirmary," in our issue of January 19th. The *Guardians* rely upon the defence of the medical officer, who says that the principal definite allegations as to the patient who got out of bed are much exaggerated. He adds: "No doubt the nurse could have coaxed the patient back to bed had she taken the trouble." But "coaxing" is frequently a lengthy process, and while it was going on any of the other sixty-one patients, including seven mental cases, might be needing urgent attention. The medical officer gives away his case, however, by his intimation that he "considers one night nurse sufficient" for sixty-two patients.

NURSING THE VICTIMS OF WILD BEASTS.

THERE are many features of interest in the article contributed to our columns this week on the nursing of injuries by wild beasts in British Central Africa. This is the kind of experience which cannot be gained in the United Kingdom, where the hippopotamus does not wander about, the crocodile is not likely to make a sudden appearance, nor the scorpion to inflict its poisonous sting. But if it could, a nurse would not be called upon to treat the patient suffering from an attack from either of these creatures; she would have the advantage of acting under the directions of a medical man. Our contributor, who has been stationed at Kota Kota, on the shores of Lake Nyassa, had to do the best she could in the absence of a doctor, who only visited the hospital "two or three times a year." So far as we can judge from her story, she did exceedingly

well, and displayed an amount of resourcefulness which tends to show not only that she is a born nurse, but that she has been thoroughly well trained.

SUICIDE OF A PROBATIONER.

AN inquiry was held last week into the death of Margaret Cathleen Roberts, a probationer at Carshalton Cottage Hospital, who was found to have committed suicide by taking a large dose of strychnine. The evidence given included that of the sister of the deceased, a nurse at Croydon Hospital, who said that the latter was twenty-two years of age, was very passionate, and, when excited, would fly into a temper very easily. The matron of Carshalton Hospital stated that on the day the girl died she had to speak to her several times for various things, and at last sent her to her room. In the afternoon the probationer rang twice in five minutes, and when the matron went up to her she began screaming and declared that she had taken strychnine. The drugs were in a cupboard just outside her door. The matron administered an emetic and sent for the doctor. One of the jurymen suggested that the drugs ought to be kept under lock and key, but Dr. Cressy rejoined that it was essential that they should be accessible when wanted, and also that they were in the safest place that could have been selected. To show how determined the deceased was, he mentioned that she not only unlocked the cupboard containing the drugs, but after she had taken the poison, put the bottle back again. The coroner thought that the matron was bound to observe discipline, and did everything she possibly could in a trying crisis. It is essential to provide cupboards for poisons in hospitals, and to keep them locked.

FRICTION AT A LIVERPOOL INFIRMARY.

THE Highfield Infirmary Committee proposed to increase the salary of their doctor from £100 to £125 per annum. Opposition was made to the proposal at the last meeting of the Select Vestry because the nurses at Highfield had joined together to memorialise the Vestry complaining of the doctor. They stated that he did not assist them in maintaining discipline in the wards. One of the members of the Vestry explained that, according to the doctor's statement, all the trouble arose because the nurses wished to punish patients against the doctor's advice, and set themselves up as censors of the doctor's conduct. He went on to assert that "an egregious blunder had been made in the first instance by putting a matron instead of a doctor at the head of the Highfield Infirmary. He was afraid there would be nothing but friction so long as a woman

Things You Must Know.

If you are a Nurse and desire to be successful and efficient you must thoroughly understand the essentials of your Profession. For instance, you must know

HOW TO BANDAGE

A PRACTICAL GUIDE TO SURGICAL BANDAGING AND DRESSING, by Dr. JOHNSON SMITH, 2s. post free, will give you all the necessary information upon this very important section of Nursing.

NAMES OF SURGICAL INSTRUMENTS AND APPLIANCES

SURGICAL INSTRUMENTS AND APPLIANCES USED IN OPERATIONS, fully illustrated, with Explanatory Notes, by HAROLD BURROWS, M.B.Lond., B.S., 1s. 8d. post free, will enable you to recognise and classify instruments required for various operations.

THE ORGANS OF THE HUMAN BODY AND THEIR PROCESSES

THE HUMAN BODY: ITS PERSONAL HYGIENE AND PRACTICAL PHYSIOLOGY, by B. P. COLTON, 5s. post free, and ELEMENTARY PHYSIOLOGY FOR NURSES, by C. F. MARSHALL, M.D., 2s. post free, are useful and complete works on this subject.

THE ANATOMY AND CONSTRUCTION OF THE BODY

ELEMENTARY ANATOMY FOR NURSES, by WILLIAM McADAM ECCLES, M.S., M.B., 2s. 6d. post free; MUSCLES AND NERVES: AN ATLAS OF THE SUPERFICIAL MUSCLES AND PRINCIPAL MOTOR NERVES OF THE HUMAN BODY, by LOUIS B. RAWLING, F.R.C.S., 3s. 9d. post free. With the assistance of these works a good knowledge of the muscular elements which enter into the formation and contour of the Human Body are rapidly obtained.

MEDICAL TERMS AND THEIR MEANINGS

THE NURSE'S DICTIONARY OF MEDICAL TERMS AND NURSING TREATMENT, with Pronunciation, compiled by HONOR MORTEN, 2s. post free, is a useful work for immediate reference, and its size will admit of it being conveniently carried in the apron pocket.

THE WHOLE ROUTINE OF NURSING, FROM THE TAKING OF THE TEMPERATURE TO NURSING THE MOST SERIOUS DISEASES

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instead of a medical man remained at the head of the institution." The whole of the circumstances may be investigated. The four nurses are ordered to appear at the next meeting of the Select Vestry.

A DIRTY MIDWIFE IN CORNWALL.

A CASE which indicates that the provisions of the Midwives Act should be more strictly enforced in Cornwall has occurred at Truro, where the Coroner inquired into the death of the female twin child of a single woman, which died a few hours after birth. The mother was attended in her confinement by an old woman who was not registered as a midwife. The Coroner observed that he was sure no committee would grant the woman a certificate. Her hands were not fit to touch a person in confinement, and if she went before a committee in such a state she would not have the slightest chance of getting a certificate. He asked her to show the jury her hands. The woman declined to do so, and the Coroner thereupon added that he considered it very disrespectful to the court to come before them in that disgustingly dirty state. In returning a verdict that the child's death was due to premature birth, the jury added a rider that the attention of the Clerk of the County Council be called to the fact that there were women practising midwifery in Truro without certificates.

THE MIDWIVES' ASSOCIATION.

THIS Association has been formed with an office at 9 Albert Square, Manchester, which is the office of the Women's Trades Union Council, "for the mutual benefit and protection of midwives." All registered midwives are eligible to become members. The entrance fee is one shilling and the weekly contribution is fourpence, in return for which financial benefits to the extent of six shillings and sixpence per week for the first four weeks, and five shillings a week for the second four weeks are offered "during cases of suspension," when not caused by the fault of the member. Members must pay contributions for 26 weeks before being entitled to the benefits, and they may, subject to the approval of the Association, obtain legal advice. There is no indication as to whether this Association is registered as a friendly society, or of the security provided for the payment of the weekly benefits. Not even the names of the bankers are given in the prospectus and leaflet which have been sent us. We are unable to ascertain how far this Association is a trade union, or whether this latter object is the main one for which it has been founded. If the Association is to be continued, it is essential that full information on these points should be forthcoming without delay.

AN IMPORTANT APPOINTMENT.

THERE were no fewer than ninety-three applications for the post of superintendent of nurses in the education branch of the Public Health Department of the London County Council, and at the meeting of the Education Committee Miss Helen L. Pearse was elected at a commencing salary of £200 a year. The conditions of this new appointment are that it shall be held during the pleasure of the Council; that the superintendent nurse shall give her whole time to the duties of her office, and shall not be allowed to take any private business; that

any fees received by her, either as a witness or in any other capacity, shall be paid to the Council; that she shall resign her appointment on marriage; that she shall enter into an agreement that she is appointed to and accepts the office upon the understanding that on retirement she shall not be entitled, and shall not make any claim, to any retiring allowance under the Superannuation Act, 1866; and that she shall submit to the Council's regulations in respect of the Superannuation and Provident Fund as now existing or as hereafter to be amended in pursuance of the Council's resolutions of October 16, 1906.

GREAT NORTHERN CENTRAL HOSPITAL.

IN consequence of the appointment of Miss Helen L. Pearse to the post created by the London County Council, the office of matron of the Great Northern Central Hospital becomes vacant. Miss Pearse, who was only elected head of the training school at the institution in Holloway Road in July 1905, began her nursing career in 1889, when she was trained for a year at the Cambridge Nurses' Home. Having worked at the Home for two years as a private nurse, she left in order to obtain a full training at St. Bartholomew's Hospital. Here she remained for five years, when she was appointed superintendent of nursing at Lambeth Poor-law Infirmary. Two years later she quitted London to assume the post of superintendent of nurses at the North Stafford Infirmary and Eye Hospital, which she held for four years when she returned to London.

TESTIMONIAL TO THE MATRON OF DARLINGTON HOSPITAL.

AT the annual meeting of the subscribers to the Darlington Hospital and Dispensary on Monday reference was made to the retirement of Miss Hunt, the matron. Warm tributes were paid by various speakers to her work, which was described as a labour of love; and it was decided unanimously to present a testimonial to her. A letter has been presented to Miss Hunt by Mrs. Edwin Pease and Mr. Edward Hutchinson, who were members of the Committee by which she was elected more than twenty years ago, stating:—"After above twenty years of devoted service to the hospital, and to the patients who have come under your charge during that period, the breaking of old ties must be very painful, and we all feel that the hospital is losing the superintendence of one who for so many years has given her best work to the cause of the suffering. The Committee recognise that while every care has been given by you to the patients, the comfort and training of the nursing staff and domestic servants has been efficiently promoted, and that by this, in conjunction with the able staff of medical men, our hospital has been raised to its present high position."

OPENING OF A NURSES' HOME IN TORONTO.

ON Monday a new residence for the nurses of the Hospital for Sick Children at Toronto was opened. The building is the gift to the hospital of Mr. J. Ross Robertson, proprietor of the *Evening Telegram*, and the ceremony was attended by a very large number of prominent citizens. The lady superintendents of several New York training

schools were present. Mr. Goldwin Smith delivered an address, and formally declared the building open. We hope to publish a plan of this building and to fully describe it.

MILDMAY NURSES IN JAMAICA.

At the time of the earthquake in Jamaica two of the four Mildmay deaconesses on the island were engaged in nursing work. They are known respectively as Sister Martha (Miss Stanley) and Sister Adelaide (Miss Wood), and are highly spoken of at the Mildmay Mission Hospital. Miss Wood was trained at St. George's Hospital, London, and worked for some years at the Mildmay Hospital as out-patient sister. Miss Wood has been in Jamaica two years, and Miss Stanley several years. Confidence is expressed that they have proved of the utmost service from their experience in tending the injured and suffering.

THE FINANCIAL POSITION OF THE NURSES' CO-OPERATION.

THE Finance Report of the Nurses' Co-operation for 1906, which was adopted at the ordinary general meeting of members on Tuesday, shows a decrease of £120 11s. 2d. in the gross receipts from patients, and a decrease of £59 4s. 5d. in the sum paid to nurses in the year 1905. The income of the Society derived from the commission on fees amounted to £2,697 17s. 4d., or, together with interest on investments and deposit with bankers, £2,819 0s. 8d., as against £2,845 11s. 10d. in 1905. After payment of all working expenses there is left an excess of income over expenditure of £720 5s. 11d., as against £830 11s. 4d. in 1905. As in 1905, the sum of £500 has been invested, making the amount of the investments in the name of the Nurses' Co-operation close upon £3,500; while the cash balance last year was £1,340 5s. 1d., as against £954 12s. 6d. in 1905. In studying these figures it must be borne in mind that the Society reached a very high level of prosperity in 1905, when receipts from patients showed an increase of £747, and the sum paid to nurses an increase of £795 over the previous year. It is matter for congratulation that the large increase of business indicated by those figures has been maintained during the past year, subject merely to the slight fluctuations which are common to all undertakings of this nature.

DISTRICT NURSES AND PATIENTS.

OWING to the kindness of various friends and subscribers, the matron and nurses of the Salford Royal Jubilee District Nurses' Home were enabled last week to give a tea party to a large number of their present and former patients. The Mayor of Salford granted the use of the Town Hall, and the Mayoress, who had entertained a party the previous evening, kindly allowed her decorations and plants to remain. Red art-muslin used as table-centres showed up the flowers and plants to advantage. At 5.30 cabs and bath chairs conveyed a few of the very old and helpless patients to the Town Hall, and by six o'clock the guests had all assembled. Tea on a liberal scale was then served, and was followed by a concert, which was thoroughly enjoyed, the entertainment being brought to a close by a magic-lantern exhibition. During the evening fruit was

handed round, and when the guests prepared for home many of them received parcels of cakes and bunches of flowers for those who were not included in the invitation to the tea party.

DEVELOPMENT OF THE SOCIAL UNION.

IN the annual report of the Nurses' Social Union some interesting details are given of its progress. Started in 1901, the Social Union held one meeting only in Somersetshire; in 1906 the number had risen to 19, and these were distributed in various centres in the counties of Gloucester and Somerset. The honorary members now include the matrons of Bristol General Hospital, Bristol Royal Infirmary, Taunton and Somerset Hospital, the Royal Mineral Hospital, and the Royal United Hospital at Bath, Yeovil Hospital, and the Free Hospital at Bridgewater. There is no doubt of the value of the Social Union, if only because of the opportunities it affords of bringing before an organised body of workers questions relating to the welfare of the people. The meetings held at different centres must have the desired effect of broadening the minds of nurses, and we can readily believe that if it were led and supported by medical men the Union might carry out the desire of its officials to wage a systematic war against such evils as infant mortality and tuberculosis.

A SUBSCRIPTION DANCE AT LEEDS.

ON Tuesday last week at the Leeds Union Infirmary the nurses held their subscription dance in the dining-hall of the Imbecile Block. The entrance-hall and corridors were prettily decorated. There were about eighty present, and dancing commenced about eight o'clock, and was kept up until half-past two, the assistant doctors acting as masters of the ceremonies.

ROYAL VICTORIA TRAINED NURSES ASSOCIATION

AN examination was held at Melbourne, Ballarat, and Bendigo by the Conjoint Board of Examiners of the Victoria Trained Nurses' Association on December 5 and 6. Sixty-eight candidates presented themselves, and fifty-nine were successful. How far the limited population of the colony will find work for professional nurses, with a yearly increase of from 100 to 120 members, remains to be proved. In the circumstances the suggestion that a nurse should cultivate some hobby between her cases, so that, if necessity arises, she could fall back upon it as a means of earning a living, may find favour.

SHORT ITEMS.

THE number of cases attended in the past year by the staff of midwives attached to the Royal Maternity Charity, 21 Finsbury Square, was 2,651; but the number of infants born was 2,700, there being twins in 49 of the cases. Eighty of the infants were still-born, the maternal deaths were 8, and the infants 43.—A number of the Church Army Mission sisters are now learning training at Princess Christian's Maternity Home at Windsor. After they have passed the examination of the Central Midwives Board and received their certificates they will be known as "Princess Christian's Church Army Maternity Nurses."—An address on the Royal National Pension Fund for Nurses was given by the Secretary, Mr. Louis Dick, at the Nurses' Co-operation, 8 New Cavendish Street, on Friday last.

The Nursing Outlook.

"From magnanimity, all fears above;
From nobler recompense, above applause,
Which owes to man's short outlook all its charm."

POOR-LAW GUARDIANS AND DISTRICT NURSING.

It is considered probable, by those who have studied the question of poor-law relief as it exists to-day, that one result to be hoped for from the labours of the Poor-Law Commission, at present sitting, is the abolition of poor-law guardians. No doubt, in the past, boards of guardians have done a considerable amount of work, and for the most part they have done it fairly well. The tendency of the day in matters of local government is, however, to centralise as much as possible, with the object of securing better control, uniform practice and greater efficiency. If, for instance, the poor-law guardians were to be abolished, and the whole of their duties transferred to a committee of the county council, the present expense of administering the poor-law should be materially reduced, and the working of the poor-law system should tend more directly, to help the really deserving poor. Further the loafers and the idle, who at present gain advantages under the existing system which tend to foster this type of undesirables and to increase its numbers, would be treated with the necessary severity. If the county councils took over the work of the guardians, a great saving might be effected by closing unnecessary buildings, and the institution of one common system could not fail to improve the discipline, and to strengthen the administration, to the advantage of the ratepayers and of the poor themselves.

We have been led to these remarks by the difficulty, which is constantly recurring in the consideration of the position, which boards of guardians should take up, in regard to district nursing. By way of illustration we may take the case of the Chorley Board of Guardians. We gather that there are twenty-six townships under the jurisdiction of this Board, in only six of which are there district nurses working at the present time. In the Chorley township there is a district nursing association, to which Colonel Silvester has left a legacy to defray the cost of a district nurse, providing the expenses of a second nurse are forthcoming within twelve months of his death. Arising out of this circumstance application was made by the District Nursing Association to the Chorley Board of Guardians, asking the latter to subscribe from £10 to £15 a year towards the cost of the second nurse referred to. In the discussion which arose, objection was raised to any grants being made for district nurses, on the twofold ground, that, in addition to Chorley,

five other townships had district nurses, and that if a grant was made to one all should have grants. Secondly, that there were twenty other districts where no nurses are employed, the ratepayers of which would have to contribute to these subscriptions and must so suffer an injustice. It is fair to assume, that where no district nurse has been engaged the ratepayers are either remiss in their duties, or belong to a class, or have other arrangements which render the services of such a nurse unnecessary to the residents. In either case, what injustice could arise from the guardians making a reasonable grant to the poorer or more efficient districts which employed nurses to attend upon the poor? As to the first objection, it is clear that if the guardians subscribe to one, they must subscribe to the support of all the district nurses in the area over which they exercise jurisdiction.

Now Guardians have authority to subscribe to public institutions and charities working within their area, which, by their work, tend to diminish the cost to the ratepayers of providing for the poor. We have pointed out, on more than one occasion, that a district nurse of the best type deserves well of all classes of the community. The advantages attaching to her work with the poor in all communities are great and ever extending. She speedily introduces neatness, order, method, sanitation and comfort into the humblest dwellings. In this way the district nurse is the handmaid of the medical officer of health and his staff, and she should become the handmaid of the boards of guardians in matters of relief in every district where the poor-law is intelligently administered. We believe that if district nurses were to be encouraged by boards of guardians, and their numbers increased, that the charge which such increase might entail upon the ratepayers through the subscriptions of the guardians, would be relatively unimportant compared with the value of the services which each district nurse might render to the poor-law in matters of relief, and to the health authority in many directions. If the work of the boards of guardians was to be relegated to a committee of the county council, we make no doubt that this important fact would be speedily recognised, and that every community would secure the services of an efficient district nurse. In an old system such as ours, prejudice and custom cause impediments to progress which new communities cannot appreciate. The shortest cut out of the difficulty is reorganisation, and the county council in this matter is, in our view, the best solution of the difficulty. In any case the more intelligent the ratepayers, and the more closely they examine into this question, the more certain is it, that, a large majority must become favourable to the grant of money by the guardians, or any substituted authority, to the support of an adequate system of district nursing.

Nursing in Tropical Climates.

By ANDREW DUNCAN, M.D., B.S., M.R.C.P., F.R.C.S., Fellow King's College, Lecturer on Tropical Medicine at the London School of Tropical Medicine, and the Westminster Hospital.

VI. ENTERIC FEVER.

(Continued from page 250.)

Woodbridge Treatment of Enteric Fever.—This treatment is recommended by Dr. Woodbridge, of America, who quotes a case-mortality of only 1.90 per cent. amongst 7,857 cases of typhoid fever, and an average duration of illness of only 12.7 days has been tried in India. Briefly, the treatment is "a general or intestinal antiseptic and eliminant one, and consists in giving very frequently (every fifteen minutes during the wakeful portion of first forty-eight hours) small doses of varying formulæ of podophyllin resin, and calomel, combined with such antiseptics as guaiacol carbonate, menthol, eucalyptol, and thymol, the indications being to produce free evacuation as early as possible, and by subsequent varying doses to keep the bowels regular. The maximum number of doses in the twenty-four hours, supposing the patient not to sleep at all, would be ninety-six."

Major Hendley, I.M.S., who has tried this method, states that he never succeeded in getting down more than seventy doses in twenty-four hours. His experience was favourable; but one does not know which to pity the most in this method, the unfortunate patient who has to take his medicine every quarter of an hour, or the unfortunate nurse who has to administer it.

We will now consider the methods of preventing the spread of enteric fever that should be carried out by the nurse, both as regards infection generally and infection of herself.

A. Measures to Prevent Infection Generally.—The enteric bacillus gains an entrance into the body through the digestive canal, being swallowed with food or drink, and occasionally through the lungs. Once swallowed, it multiplies in the bowel, and in so doing causes the changes in the intestines of which mention has been made, and then leaves the body again by the stools and urine. When it has entered by the lungs the bacillus will be present in the sputum coughed up; when it leaves the body by the excreta it may infect the bed-clothes, the utensils receiving the discharges, the hands of patients and of the nurses, unless kept clean and disinfected. It will also, of course, infect any food and drink with which it is brought into contact.

To take the evacuations first. As regards these an antiseptic should be placed in the bed-pan before use. This may consist of a carbolic acid 10 per cent. solution. After the excreta has been passed add some more of the disinfectant, so that the quantity may equal the bulk of the excretion. Thoroughly stir it up, then cover over with a cloth, and let the antiseptic act for at least half an hour before the stool is buried. Other disinfectants that can be used are a 1% lysol solution or a 1-500 corrosive sublimate. This by many is not advised, as it hardens the albuminous material outside the faecal masses, but personally I have never found any failure from this reagent. The nurse should bear

in mind the necessity of disinfecting the urine. The sputum should be disinfected in the same way. After being thus treated, the discharges are to be buried in the earth; the depth at which they are to be buried is variously recommended. Some authorities say at least two feet, whereas the late Dr. Vivian Poore was an advocate for shallow burial; and, in the only instance falling under my observation of this way of disposal of the faeces, the results were excellent. The best method, however, of treating the excreta is to burn them, mixing them with sawdust. Should the discharges containing the bacillus be thrown on the ground without being disinfected, through the carelessness of the "sweeper," the well in the compound would be infected should the germ reach it. The dangerous consequences ensuing on such a course of action were well shown by the extensive epidemic that occurred in the town of Plymouth in Pennsylvania in 1885. Here a man convalescent from enteric fever was found by the Committee who were appointed to investigate the outbreak to be living in the only house on the banks of a mountain stream of great purity that formed part of the water-supply of the town. Only the people supplied from this source suffered. During the illness of this man his stools were thrown on the snow on the ground within a few feet of the above stream. This was in February and March. At the end of March the snow began to melt, and in April this melting was completed by the occurrence of frequent showers with mild warm weather. The first case of enteric was reported on April 9. Within the next five days thirteen more cases occurred, and then a large increase took place, a great outburst flaring up about the middle of the month. More than 1,000 cases occurred in all.

The stools should be disinfected as soon as they are passed, as their infective properties appear to be developed in about twelve hours.

All utensils, feeding-cups, enema-syringes, etc., used by the patient must be scrupulously disinfected. The soiled bed-linen and dress of the patient must be likewise so treated, and they should be also disinfected at once, lest any infectious particle dry on them, and subsequently be wafted off into the air as dust, and then settle on some food and infect it. The linen can be put into a large tub and soaked in disinfectant solution, afterwards boiled, and then dried in the sun. Burn all small pieces of linen that may have been in contact with any discharge.

Lastly, we have before alluded to the part played by flies in propagating the disease. They should be kept excluded from the chamber of the sick by attention to the "chicks"; and the stools, during the time they are kept exposed to the action of the disinfectant, before they are disposed of, must be carefully covered over with a cloth.

[As regards the infection that may be carried by the patient himself for some length of time during

convalescence by the urine, urotropine in 7-grain doses should be administered three times daily for at least a month.]

We now come to the precautions to be undertaken by the nurse herself. A golden rule in the East is never to drink any unfiltered water. The only efficient filters are the Berkefeld and the Pasteur. The Berkefeld Company sell an excellent portable one.

Another method of disinfecting the drinking water is that of Parker and Rideal, who state that the bacillus typhosus is killed after five minutes' contact with bisulphate of soda in the proportion of 15.5 grains to the pint of water. Fifteen minutes' contact is more advantageous. Firth, however, says that forty-five minutes' contact is necessary in order absolutely to sterilise the water.

The nurse should not wear her nails long, and after attending to the patient in any way, she should always wash her hands well with a brush, and then immerse them in some disinfectant solution for at least five minutes, and then rinse them in clean water. She should always wash her hands and disinfect them before taking her own meals, which must not be eaten in the sick chamber.

Antityphoid Inoculation.—Professor Sir A. Wright has introduced this method of prevention. What is the evidence in its favour? It would appear to me to be overwhelming. The published statistics from six hospitals, for instance, in the South African War—namely, those of the Lady-smith, Princess Christian, Portland, Scottish National Red Cross, Kroonstadt, and Harrismith Hospitals—all concur in showing a much less incidence on the inoculated than on the uninoculated. But an example of the benefit thereby accruing, which is more apposite as far as nursing is concerned, was shown by the epidemic in Maidstone. Here, of 120 nurses who were not inoculated, 16 were seized with enteric, whereas of 84 nurses and attendants inoculated, not one was attacked. As regards the advisability of being inoculated as a preventive against enteric fever, I can only state that if I were again about to embark on a career in

India at the age that one enters Indian service, I would most certainly be inoculated myself.

SUMMARY OF THE ESPECIAL POINTS IN NURSING A CASE OF ENTERIC FEVER.

1. Do not pile on bed-clothes. A sheet is quite sufficient protection from cold.
2. From the beginning of the case take precautions against bed-sores.
3. Keep the patient's teeth, nose, and mouth clean with a disinfectant.
4. Remove all soiled bed-linen at once, and disinfect them.
5. Disinfect the faeces and the urine directly they are passed. Let them be exposed to the action of the disinfectant at least half an hour before disposal.
6. Alter the position of the patient in the bed from time to time, so that too much pressure be not exerted on one part of his body.
7. It is not necessary to wake the patient up always for his food if he is sleeping. If he is in a state of stupor his food must be given him.
8. If there be signs of hæmorrhage in the intestine before the doctor comes
 - (a) Stop all food;
 - (b) Keep the patient absolutely at rest;
 - (c) Apply an ice-bag to the right iliac region.
9. Report at once—
 - (a) If any curds found in the stools;
 - (b) If any pain in the abdomen;
 - (c) If any sudden rise or fall of temperature.
 - (d) If any hæmorrhage.
10. Always wash your hands with some disinfectant after attending to the patient, and before taking your own meals.
11. Do not take your meals in the sick-room.
12. Keep all flies away from the patient.
13. Never yield to the patient's hunger and give him more than he is ordered.
14. The patient should never be left alone.

The Nurses' Clinic.

ERYSIPELAS.

ERYSIPELAS—or St. Anthony's Fire, as it is sometimes called—does not occur now so frequently in England as it did before the days of antiseptics and asepsis; but even in present times, when all precautions are taken, it appears sometimes.

Generally it starts from a wound, scratch, or skin abrasion of some sort, though this is not always the case, as some people are subject to it without any wound at all, and it is then called medical or idiopathic erysipelas, in contradistinction to surgical erysipelas, or that arising from a wound.

This complaint is distinctly contagious, and in nursing it the nurse must be most careful not to have an open sore, cut, scratch, or even pin-prick on her hands, or she will run great risk of taking it.

Erysipelas is a peculiar form of inflammation of the skin. If not determined by a wound, it most commonly attacks the face, starting by one or more red spots, which spread

rapidly, making the whole surface affected bright red, very much swollen and oedematous, with one or more blebs filled with yellowish fluid.

The eyelids and ears are very puffy, resembling bladders, and from the eyes runs a watery discharge. It is a painful disease, and often the glands of the affected parts are swollen and tender.

If a rash starts at a wound, the greater precaution must be taken by the nurse when doing the dressing. All soiled dressings and discharges must be burnt at once, and receivers, forceps, probes, etc., that are being used for such a case should be kept quite separate, even when sterilised.

The nurse, of course, must be most careful about washing and disinfecting her hands after touching a case.

If the disease has attacked the face, especial attention must be paid to keeping all cups, spoons, etc., for that patient only.

Different doctors have their different methods of treat-

THE NURSES' CLINIC.—*Continued.*

ment, but the most popular appears to be dressing the wound and then powdering the red inflamed part with starch, zinc, or boric powder, and keeping the infected area covered with a mask of cotton-wool if on the face, or pads of cotton-wool lightly bandaged on any other part. The patient's strength must be kept up with plenty of milk, beef-tea, chicken broth, and sometimes port wine or brandy may be ordered. Many medical men order tincture of iron, which seems by some to be considered a specific for erysipelas. The patient will probably be very weak, as generally a high temperature is run, frequently rising to 105°. After the fourth day, in a normal case, the temperature will probably drop.

Be most careful to keep the patient from any chills, as such invalids are very susceptible to pleurisy, pneumonia, and kidney trouble.

The patient should be warmly covered up, kept in an even temperature, without draughts, and all symptoms or changes must be carefully noted and reported to the doctor, such as pains in the heart, or cough, etc. In some cases, especially of facial erysipelas, they get, occasionally, a "murmur" in the heart during the early days of the disease, which passes off later on.

For idiopathic erysipelas lead lotion is frequently ordered to be applied to the face in the shape of a lint mask dipped into the solution and applied to the face. This seems to give great relief to the pain and swelling, which subsides very soon after its application. I had several bad cases of medical erysipelas abroad as a complication of typhoid fever. One case was very remarkable. The patient had had typhoid fever with two relapses, and after two and a half months was fairly convalescent, being already on light food, when one morning at 10 A.M. he told me he had been stung by a sandfly. I looked at the right side of the chest and saw it was red and slightly swollen, and had the appearance of having been stung, but after careful examination I could not find the smallest puncture of a sting. Lead lotion compresses were applied, but the patient still seemed very uneasy, and two hours later the swelling and redness had spread to the left side of the chest and the swelling had

increased greatly. The temperature was now 105°, and the patient was wandering in his speech. From this time on he got gradually worse, and died at 6 P.M.

Another case was also a typhoid convalescent, who started erysipelas down one side of the face. He got a large sloughing abscess in the neck, and was in hospital with it over two and a half months, but recovered eventually. In both these cases the cause of the erysipelas could not be traced, as there had been no other cases in the ward at the time.

In medical erysipelas the native patients resort greatly to "charms" for curing themselves. An old woman comes around with a bit of red twill and a blest candle, and, going through a ceremony with many incantations, is supposed to have charmed away the disease; and, strangely enough, I have seen some very bad cases completely cured in twenty-four hours after this performance.

Medical erysipelas is seldom fatal, and, if properly nursed, generally gets well quickly; and though a run of such cases means continual work, such as changing dressings, fixing masks, applying lotions, and seeing that nourishment is taken properly, yet they are very satisfactory, as they yield to treatment very quickly. Some people get the complaint again and again at short intervals, in the same way as others suffer from hay-fever. After a time one gets very used to these cases, and it is most necessary for a nurse not to get slack over the disinfecting part of the nursing, or she may learn to her own cost what carelessness in this respect may lead to.

The surgical erysipelas fatal cases are not so rare, but generally occur in old people, especially if they are suffering from any virulent complaint or from chronic alcoholism. When the red rash dies off, or rather turns brown, the blebs dry up and peel off as in scarlet fever; and it is wise to paint the face with oil or simple ointment, to keep the particles from flying about.

If the scalp has been affected, probably all the hair will fall out.

Sanitary surroundings and cleanliness of person are to be specially recommended to patients who are subject to a frequent recurrence of the complaint, as dirt is often a great factor in starting it.

Incidents in a Nurse's Life.

A PROVIDENTIAL LAPSE OF MEMORY.

It is seldom indeed that any lapse of memory has beneficial results in hospital life, and within my recollection only one example has occurred. I was in one of the large London hospitals on night duty when, early in the evening, an accident case was admitted. A man of middle age had slipped between the platform and a moving train, and the flesh had been cleanly cut away from the lower leg, leaving the tibia exposed for many inches. He was returning from the races, where he had been successful in making a big pile, which, however, had all gone when I turned out his pockets, except a few shillings. He had been drinking heavily, but the shock had sobered him, and he demanded to know how much was left out of the £30 he had taken, and wondered vaguely where the rest had gone.

Once in bed, he was put under an anæsthetic and his wound scrubbed with soap and water and strong disinfectants; but the dirt and train oil were ground deeply into the flesh, and in two days it was streaming with pus.

On the third night upon coming on duty I was amazed to see him in a theatre-gown, with his head shaved and compressed, and to learn that he had developed tetanus and was to be trepanned at once, that the antitoxic serum might be

injected into the brain. I was unable to be present in the theatre, no staff nurse being permitted to leave her ward at night; but the dark hours were anxious ones, and the terrible spasms took hold of him again before morning. He was put on the danger list, and a woman and child came up and stayed with him almost continuously.

On the third night after the operation he was very weak and partly unconscious, and it did not need a greatly experienced eye to see he would not last till morning. The young woman and the child remained at the bedside for a while and then departed. He showed some signs of consciousness when I spoke to him or tended him in any way, but he was terribly feeble, and before daylight came the faint spark had gone out and life's debt was paid. Sister, coming on duty in the morning, stopped at the empty bed.

"Nurse, did you notice the folded paper in the rack over the bed?" she said quietly, while I saw her face change.

"Yes, it's with the notes of the case and the chart, sister; I supposed it was part of the history."

"Unfortunately it was a will a lawyer brought in yesterday. The patient was not conscious at the time, and he begged me to get it signed if any way possible before he died. I'm afraid it was my fault it was forgotten."

I could see she was more vexed than she cared to allow at her lapse of memory, and I said reassuringly :—

"I don't think there was any moment of the night when his brain was sufficiently clear or his hand steady enough for him to have put his signature to anything."

Nursing in British Central Africa.

INJURIES BY WILD BEASTS.

DURING the last few years I have had to treat several cases of injury by wild beasts. I have been stationed at Kota Kota, on Lake Nyassa. Our doctor visits us two or three times a year, and in his absence I have to do the best I can.

A HIPPOPOTAMUS BITE.

I was told one Saturday that a man had been bitten by a hippopotamus at a place about twenty-five miles distant. The only means of getting there was by being carried in a hammock, and it was a whole day's journey distant. My informant was not at all sure that I should find the injured man at the village at which the accident occurred, as his relatives would probably have conveyed him up to the hills if he were still living. It was not worth while going so far for anything so uncertain, so I sent a message to say that I would admit him into hospital if he cared to come. On the following Tuesday morning while I was busy in the dispensary a tall native walked in and stood silently awaiting his turn. I glanced up at him and perceived that he was a stranger and was looking exceedingly ill, so I told him to sit down and asked him what ailed him. For answer he raised a dirty piece of calico that was draped like a shawl over his right shoulder and disclosed the fact that his arm was missing. The hippopotamus had bitten it clean off about four inches above the elbow. The man had gone into the river to fetch his fish-trap and found a large hippo. in the act of destroying it. He had attacked the beast with his spear, but it turned quickly, and seizing him by the arm swam off. Its teeth met through the arm, and the man dropped, and with a great effort swam to the shore. His friends had fixed on a tourniquet made of bark-rope, tightened up with a stick; they had applied a kind of bird-lime to the wound, and recommended him to come to me. It had taken him about three days to perform a journey which he could have ordinarily accomplished in one.

TREATMENT OF THE WOUND.

The wound, or the bird-lime, or both, had proved very attractive to flies, and the first three days after his arrival were spent in trying to cleanse the wound from maggots, which developed in three distinct crops. The native dressing was excessively sticky and adherent, and in spite of continual fomenting and soaking I was unable to get it off for several days. I was afraid to use any force in removing it lest I should cause any of the severed arteries to bleed. The wound was well packed with sulphur and cyanide gauze and the patient's strength kept up with nourishing diet and stimulants. The wound cleaned up wonderfully, and as soon as it was quite clean it began to heal rapidly. In three months it was soundly healed, and the patient returned home.

INJURED BY A CROCODILE.

I was asked to come and see a man who had been mauled by a crocodile. He had been sleeping outside his hut, and the crocodile had seized him by the hands. He shouted out, and his wife ran out of the hut and drove the creature off with a hoe. There were several wounds on both hands, the top of one thumb was nearly

severed, and the right forearm was fractured, both radius and ulna. The patient was admitted into hospital, the wounds well cleansed, and, where possible, stitched up—there were seventeen stitches in all—and the fracture reduced as well as possible under the circumstances. To my astonishment the patient did well. The only wound that suppurated was that in the thumb, the tip of it sloughed off, but the stump healed all right.

POISONED BY A SCORPION.

The following case of scorpion sting is interesting, though perhaps it can hardly be called an injury by a "wild beast." A prisoner working in the garden felt suddenly a sharp pain in the knuckle of his middle finger, and found he had been stung by a scorpion. His finger was very painful, and he complained of it to the warder when being locked up for the night, but no notice was taken of his complaint. Early in the morning, however, the warder was aroused by his cries, and found him in great pain. His whole hand and arm were terribly swollen, the skin tight and shiny, and looking as though it must burst. He was at once brought down to me. The exact spot where the poison had entered was not discernible, and the patient was wholly unable to locate it; could not even remember in which finger it had been, or I should have made a cruciform incision and treated it with pot. permang., as for snake bite. The only thing I could think of was to apply hot glycerine and belladonna fomentations at frequent intervals, and give the patient stimulants. These relieved the pain, but for twenty-four hours the swelling increased until the whole of the left side of his chest and back were greatly swollen. The pulse was less rapid, however, and the temperature remained as it was when the patient was admitted. Thirty-six hours after admission the swelling had very greatly decreased, and twelve hours later only the hand was swollen. The seat of injury was then visible, and suppuration was going on all round it. An incision was made, and carbolic fomentations applied to the finger. The patient insisted on going out before it was absolutely healed. A few months later he returned with an abscess on that finger reaching down to the bone. It was suggested that he should have an anæsthetic and have it scraped, but he absolutely refused. When seen a few months later the two first phalanges of the finger had sloughed right off, but the stump had healed.

To Nurses.

We invite contributions from any of our readers, and shall be glad to pay for "Notes on News from the Nursing World," "Incidents in a Nurse's Life," or for articles describing nursing experiences at home or abroad dealing with any nursing question from an original point of view, according to length. The minimum payment is 5s. Contributions on topical subjects are specially welcome. Notices of appointments, letters, entertainments, presentations, and deaths are not paid for, but we are always glad to receive them. All rejected manuscripts are returned in due course, and all payments for manuscripts used are made as early as possible after the beginning of each quarter.

Nursing Spotted Fever in Belfast.

FROM A CORRESPONDENT.

DURING the past few weeks much anxiety and alarm has been caused amongst the people of Belfast through the outbreak of "Spotted Fever," otherwise called epidemic cerebro-spinal meningitis.

Each day of late has brought reports of one or more fresh cases of the fever.

The cause of the outbreak is as yet unknown, and the sanitary authorities have not so far been able to get at the root of the trouble. The epidemic has not confined itself to any particular locality, nor have the cases been in the slums of the city. Most of them have occurred at distances from one another, and a good many of them in open and respectable streets. In one or two instances only have several children of one family been attacked.

The fever is said to be contagious in some way, but in what way is not clearly known, any more than the period of incubation from the time the disease germ enters the system until the symptoms show themselves. Up to the present time in most cases the onset has been apparently sudden. A few words may be said as to the symptoms which have been noticed in most of the cases since the outbreak of this epidemic. The patients in the first instance all suffered from severe headache and vomiting; the headache gradually got worse; after a few hours painful contractions of the muscles of the neck began, the pupils were widely dilated, there was flexion of the knee-joints, and rigidity of the muscles.

The second day small hæmorrhagic spots appeared on the legs and lower parts of the abdomen; in some cases there was violent delirium, the temperature in bad cases reached 106° F., the patients as a rule were highly sensitive to touch, every movement giving the most intense pain. After the first twenty-four hours, or even earlier in bad cases, the patient sank into a comatose condition, became cyanosed, with stertorous breathing, and died from thirty-six to seventy-two hours from the onset of the disease.

In the present epidemic the disease seems to be chiefly confined to children and young adults. The first case brought under notice was that of a young medical student, about twenty-three years of age, who lodged in a good locality of the city, was a student of the Queen's College, and attended classes at the Royal Victoria Hospital. He had been at the hospital as usual on the Saturday previous to his illness. On Sunday morning he went for a walk, feeling in his usual health except for slight headache, and said to one of his friends that he felt he was taking a cold. On Monday the headache was worse, and feeling sick and out of sorts, he was unable to leave his bed; during the evening a doctor was called, who found him in a serious condition. He was sent to the Royal Victoria Hospital without delay, and, in spite of everything that could be done, he died on the afternoon of Tuesday, having some hours previous to death sunk into a comatose condition, with stertorous breathing. As the disease had been diagnosed as "Spotted Fever," precautions were taken to disinfect the private ward in which he was nursed.

Another case a few days later was that of a young man of sixteen, a shop assistant in the city. He was admitted to the isolation wards of the same hospital, but he also died about forty-eight hours after admission.

Since then four children of one family contracted the fever, no symptoms being visible until within a few hours of death. The children went to bed at night apparently in their usual health; during the night two of them, who were sleeping in the same bed, became ill. One

child was dead before a medical man could be summoned, and another was dying when the doctor came. Two other children of the family in the same house were next found to have acute symptoms, and later on in the day both died; a fifth child, complaining of headache, was at once taken to the Belfast Infectious Diseases Hospital at Purdysburn, where he was placed under observation, and is now convalescing from a slight attack of the fever. Since then a sixth child of the same family has developed the disease; he has also been taken to Purdysburn, as have all other cases since reported. Up to the time of writing the cases number 45, the number of deaths being 21.

With regard to the nursing of these cases. In most instances the head is shaved and the ice cap applied in the usual way; as the patient is generally collapsed the heat of the body is kept up by hot-water bottles and blankets. In some cases blistering the spine may be ordered, and lumbar puncture is often done by the doctor to relieve tension; in both instances the skin, etc., will require the ordinary aseptic preparation. The patient's thirst is generally very great, and as much fluid nourishment as can be taken may be given, as emaciation and exhaustion are rapid. When the muscles of the neck become rigid the patient is unable to swallow, and nasal feeding is the only hope of giving nourishment; stimulant also which will most likely be ordered may be given in this way.

The nurse requires to handle the patient with the greatest gentleness, as when conscious he is acutely sensitive to pain.

The patient as a rule loses control of the bladder and rectum, and the bed will require frequent changing; some patients suffer from diarrhoea, for which little can be done; others from constipation, for which calomel is often prescribed.

When the delirium is violent the physician sometimes orders morphine hypodermically, or chloral, which is given in the nasal feed or by rectum.

The nurse may also be required to give inunctions in the groin and axilla alternately twice daily of a mercurial ointment prescribed as an antiseptic.

The temperature, pulse and respiration must be charted four hourly.

When the case is favourable the temperature generally comes down in about a week's time after the acute stage, but is apt to go up again in a day or two. The convalescence is very slow and is attended by frequent relapses for the first six weeks, and it is said that those who recover sometimes suffer from a form of paralysis. The period of convalescence is said to occupy from two to six months, and tonic treatment is ordered. It is hoped that Belfast will soon be rid of this epidemic, which has already caused so much anxiety and distress.

Where to Go.

THE DOWDESWELL GALLERIES.—At the Dowdeswell Galleries Mr. Oliver Hall is showing some charming examples of his recent work. Mr. Hall has some of the restful quality which gives the work of Constable so much charm, and his treatment of trees often suggests the work of that master. He is particularly happy in dealing with Yorkshire scenes, and the pictures of Knaresborough, Bolton Priory, and Fountains Abbey will bring pleasant memories to those who are familiar with the places. And to all the tender fidelity of the work will be welcome, as a change from the vagaries of the impressionist school.

Meeting of the Central Midwives Board.

A MEETING of the Central Midwives Board was held at Caxton House on Thursday last week. Dr. Champneys was in the chair, and there were also present Miss Paget, Miss Wilson, Mr. Parker Young, Dr. Dakin, Mrs. Latter, and Mr. Ward Cousins.

The minutes of the last general meeting on November 29 having been passed, there were the reports of two meetings of the Standing Committee to be dealt with. At the first of these, on December 13, on further consideration of a letter, referred to the committee by the Board, from Dr. Vacher, county medical officer, Cheshire, enclosing a circular and copy of an advertisement presumed to be issued by a certified midwife, and asking the Board to deal with the matter, the committee recommended that the local supervising authority be requested to state whether in their opinion a *prima facie* case of malpractice or misconduct has been established within the meaning of Section 8 (2) of the Midwives Act. This was carried.

EXTENSION OF THE ACT TO IRELAND.

A letter was read from the Assistant Under-Secretary for Ireland explaining that, under the present circumstances, when a great many nursing posts were open only to candidates who had obtained the certificate of the Central Midwives Board, nurses who had passed through the maternity training schools in Ireland were disqualified for such posts unless they went to the expense of coming over to England to obtain the Central Midwives Board certificate. He was, therefore, instructed to inquire, on behalf of the Lord Lieutenant whether there would be any objection on the part of the Board to steps being taken to amend the Midwives Act, 1902, so as to enable the Board to hold examinations in Ireland. This once more roused a discussion on the negative attitude adopted by Ireland in the first instance towards the Act and the inexpediency of sending examiners over to Ireland to certify midwives over whom the Board would have no further control. Finally, on a motion proposed by Miss Wilson, seconded by Miss Paget, it was decided to reply "that the Board recognises the difficulties of an extension of the Midwives Act to Ireland, but would look with favour on a new Act for Ireland framed on the lines of the present Act."

THE AMENDMENT OF THE RULES.

In considering the amendment of the rules, many of which had been already dealt with and adopted by the Board, the committee recommended "that the Privy Council be asked whether the Board has power under the Midwives Act to frame a rule providing for the removal from the roll of the name of a woman wishing to retire." This arose from the fact that the Board has received a number of applications from *bona fide* midwives who do not feel competent to carry out the rules of the Act, but wished to retire with honour. At present the only means of removing their name from the roll is to convict them of malpractice or misconduct. The recommendation was carried, the chairman remarking that it was a very laudable desire on the part of the *bona fide* midwives; but Mr. Ward Cousins was suspicious that after their names were removed they might continue to practise in secret.

For the purpose of consideration of the method of revision of the lists of approved training schools, teachers, and midwives, and reporting thereon, it was resolved that a sub-committee be appointed, to consist of Dr. Dakin, Miss Paget, and Miss Wilson; and a meeting of this sub-committee was arranged for Thursday, March 7, at 2.15 p.m.

THE NOTIFICATION OF STILL-BIRTH.

The report of the Standing Committee, which met on January 24, called to the notice of the Board a letter from Sir Shirley Murphy, County Medical Officer for London, suggesting an alteration in the form of a notification of a still-birth, and it was agreed that the matter be considered on the final revision of the Rules.

A COPENHAGEN CANDIDATE.

A question arose as to the admission to the February examination of a candidate whose certificate had been signed by Professor Meyer, of Copenhagen. Although Professor Meyer is not a recognised teacher under the Act, his name, as the Chairman pointed out, would be a welcome and honoured acquisition to the list. The candidate who now wishes to obtain the certificate of the Board has had a longer and more thorough training than any we give to midwives in this country, and it seemed only just and right that the Board should be allowed to modify its own rules rather than refuse such an eligible candidate. A motion to this effect was put by Miss Paget, seconded by Mrs. Latter, and carried.

THE PENAL CASES.

Certain charges were alleged against Mary James, Mary Lixton, Hannah Rhodes, and Sarah Scott by their respective local supervising authorities, but the Board decided that they should not be cited until the matter had been investigated more fully. Mr. Parker Young and Mr. Ward Cousins were, however, of the opinion that the Board should do its utmost to remove from the roll such midwives as Mary James, who could neither read nor write, for, though her bag was found to be satisfactory and to contain the prescribed appliances, they were no good to her as she did not know how to use them. They maintained that it was a grave mistake for the Act ever to have admitted these women. It was further agreed that Elizabeth Webb and Lillian S. Williams be called upon to furnish an explanation of the charges alleged against them and that no action be taken in the cases of Sarah Elizabeth Ellison and Dinah Ann Peace.

The financial statement was not quite so satisfactory as it has hitherto been, and the Secretary informed the Board that it would soon be necessary to sell out some of their stock.

THE CASE OF WHITECHAPEL INFIRMARY.

A letter was read from Dr. Larder, medical superintendent of the Whitechapel Union Infirmary, renewing the application of the Guardians for the approval of the infirmary as a training school. Owing, however, to the absence of Mr. Fordham, the motions relating to this question on the agenda were postponed. Some discussion arose as to the right of the Board to refuse their approval of any place as a training school on structural grounds, and the Chairman explained that the general feeling was that so long as the training given by a school was efficient, that had no right to refuse approval, as they had already "approved" some institutions which had no "structure" at all, but did their work entirely amongst out-patients.

The next meeting of the Board was fixed for February 28, at 2.45 p.m.

Queen Victoria's Jubilee Institute for Nurses.

MISS M. WILKINSON has been appointed to Barford, Warwickshire; Miss Helen M. Weale, to Grimsby; Miss M. W. Leonard, to Rochdale; Miss G. E. Gomm, to Blaizdon, Gloucestershire; and Miss Lucy Davies, to Llangefni, Anglesey. Miss F. E. Whitfield has been temporarily appointed to Norwich as superintendent; Miss Madeline Naylor, to Harpurhey Home, Manchester; Miss S. W. J. Hadden, to Edensor; Miss Florence Green, to Gloucester; and Miss K. Berkeley Smith, to Hanley. Miss T. J. Lesser has been transferred from Hackney to South Tottenham, and Miss Dorothy Bracewell from Cheadle Hulme to Bolton.

Everybody's Opinion.

[Correspondence on all subjects is invited, but we cannot in any way be responsible for the opinions expressed by our correspondents. No communication can be entertained if the name and address of the correspondent are not given as a guarantee of good faith, but not necessarily for publication. All correspondents should write on one side of the paper only.]

A PROBATIONER LOSES HER SIGHT.

"J. B. F." writes from 43 Montpellier Terrace, Cheltenham: I beg to enclose a cheque for £1 for the nurse whose sight was so injured by a typhoid patient spitting in her face. I trust that she may make a better recovery than is anticipated, and be able to resume her career of usefulness.

THE Secretary of the Royal National Pension Fund for Nurses writes: I enclose a postal-order for 2s. 6d. which I have received from Nurse R. Webb of the Camberwell Infirmary, Constance Road, East Dulwich, for the West Ham Infirmary probationer, whose case has been described in your columns.

A MATRON'S APPOINTMENT.

THE MATRON of the City Fever Hospital, Grafton Street, Liverpool, writes that Miss O'Brien, the new matron of the Manchester and District Joint Isolation Hospital, was charge nurse and not assistant matron of the Grafton Street Hospital.

BRITISH LYING-IN HOSPITAL.

MRS. GERALD MAUDE, Hon. Secretary of the British Lying-in Hospital, writes: I shall be much obliged if you will allow me the use of your columns to state that a bazaar in aid of this hospital (which is greatly in need of funds) is arranged to take place at Prince's Skating Rink on May 29 and 30 next, under the special patronage of H.R.H. the Princess of Wales, H.R.H. the Princess Royal, and H.R.H. Princess Louise (Duchess of Argyll), and that the latter has graciously consented to perform the opening ceremony. Amongst the stalls will be one conducted by the matron and the nurses, at which all sorts of garments suitable for poor women and children will be sold, and, as there are many nurses throughout the country who have been trained at the hospital, I wish to say that, if they would individually contribute one or even two articles towards the stocking of the stall, such gifts would be much appreciated. They should be sent to me at 50 Onslow Gardens, London, S.W., not later than April 31.

Appointments.

BOLTON BOROUGH FEVER HOSPITAL.—Miss Irene Webb has been appointed matron. She was trained at the London Hospital, Whitechapel, E., and has since been night superintendent at Grove Fever Hospital, Tooting, S.W., assistant matron at the Fountain Fever Hospital, Tooting, S.W., matron of the Fever Hospital, Leicester, and matron of the Fever Hospital, Gravesend.

BROADSTONE JUBILEE HOSPITAL, PORT GLASGOW.—Miss Minnie Templeton has been appointed matron. She was trained at the Glasgow Western Infirmary, and has since been sister at Greenock Infirmary.

CANCER HOSPITAL, FULHAM ROAD, LONDON.—Miss Bridgett M. Powell has been appointed staff nurse. She was trained at the Royal South Hants Hospital, Southampton.

HAMMERSMITH INFIRMARY, WORMWOOD SCRUBS.—Miss Marie White and Miss Dora Williams have been appointed staff nurses in the maternity ward. Miss White was trained at the London Hospital, Whitechapel, E., and has been on the private staff. Miss Williams was trained at Bradford

Union Infirmary, and has since done private nursing at Harrogate.

MELKSHAM COTTAGE HOSPITAL.—Miss Maud Constance Saunderson has been appointed matron. She was trained at the Royal Albert Edward Infirmary, Wigan, where she subsequently held the posts of ward sister and night sister. She has since been assistant matron at Her Majesty's Hospital, Stepney, London.

ROYAL CHEST HOSPITAL, CITY ROAD, LONDON.—Miss F. M. Long has been appointed night superintendent. She was trained at the Royal Hants County Hospital, Winchester, where she was afterwards sister, and she has since been night sister at Salop Infirmary, Shrewsbury.

SALISBURY HOSTEL, RHODESIA, SOUTH AFRICA.—Miss Lillian E. Allen has been appointed maternity nurse. She was trained at the West Ham Infirmary, where she was afterward staff nurse and ward sister. Subsequently she was charge nurse at Long Reach Small-pox Hospital, Dartford, Kent; charge nurse at the Eastern Fever Hospital, Homerton, N.E.; and midwife at St. George's Workhouse, Buckingham Palace Road, S.W.

TETBURY COTTAGE HOSPITAL.—Miss Alice Edith Keeble has been appointed matron. She was trained at the Royal Albert Edward Infirmary, Wigan, and she has filled various staff posts in that institution since the completion of her training. For the last three years she has been sister-in-charge of the operating theatre.

WREXHAM JOINT FEVER HOSPITAL.—Miss Margaret O'Neill has been appointed staff nurse. She was trained at Belfast Union Infirmary, where she has since been staff nurse. She has also been attached to a nursing institute at Cheltenham.

The Nurses' Bookshelf.

A MANUAL FOR NURSES ON ABDOMINAL SURGERY. BY HAROLD BURROWS, M.B., F.R.C.S. London. (The Scientific Press, Limited. Pp. 142. Illustrated. Price 2s. 6d. net.)

THE education of nurses proceeds apace. It was formerly sufficient if they could make a bed, light a fire, and give the doctor a plain answer as to whether the patient had slept and eaten. Nowadays a nurse is as highly trained in her own department as is the attending medical man in his profession. She knows not only the names of the diseases, but often a great deal about their signs and symptoms. She can observe details, and give an absolutely reliable account of her observations. This book on abdominal surgery helps her still further. It teaches her the causes of the signs and symptoms that she is called upon to note. It is written clearly and concisely by one who is evidently an excellent surgeon endowed with the gift of teaching, for it is expressed in clear and simple language, whilst the information is both sound and practical.

Mr. Burrows deals first with the symptoms common to most forms of abdominal disease, and points out the features which distinguish dangerous conditions from those of minor importance. He then considers the subjects of peritonitis, hernia, obstruction of the bowels, affections of the liver and pelvic organs so far as they come within the purview of the general surgeon. There is a chapter on the methods of preparing a patient for abdominal section and another chapter on the after-troubles and complications of abdominal operations. The book ends with some suggestions on feeding. There is a sufficient index and some diagrams by way of rendering the text more easy to follow. The book is easy to read and contains much that is useful; it ought, therefore, to be of very great value to nurses as a guide to them in the execution of a difficult and responsible section of their work.

The Hospital.

Nursing Section.

Contributions for "THE HOSPITAL," should be addressed to the EDITOR, "THE HOSPITAL,"
NURSING SECTION, 28 & 29 Southampton Street, Strand, London, W.C.

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SATURDAY, FEBRUARY 16, 1907.

Notes on News from the Nursing World.

DEATH OF THE COUNTESS CADOGAN.

NURSES in many parts of the country will share our deep regret at the death of Countess Cadogan, which took place on Saturday last. Her interest in nursing and sympathy for nurses was shown in a variety of ways. The extension of the Jubilee Institute to Ireland was mainly due to her efforts, and when Queen Victoria visited the sister island, she arranged that the Queen's nurses should have the pleasure of being inspected at the Viceregal Lodge by her Majesty. Subsequently, they enjoyed her hospitality. Lady Cadogan was for some years a member of the Advisory Board of the Junius S. Morgan Benevolent Fund of the Royal National Pension Fund for Nurses, and her services in this capacity were highly appreciated by her colleagues.

THE RESIGNATIONS AT THE BRITISH LYING-IN HOSPITAL.

At a meeting of the Board of Management of the British Lying-in Hospital on Tuesday last the resignations of the matron, Miss Gertrude Knott, and of the sister, Miss Alice Sanderson, were presumably discussed, and it is understood that much regret was expressed that they had been tendered. The work carried on under the auspices of Miss Knott and her colleague were so fully described in our issue of January 26 that nothing remains to be said concerning it. The matron, in the interview with our Commissioner, did not complain of the fact that no resident medical officer is attached to the hospital; but there is no doubt that she has felt the need of such an appointment, and that she has at last rebelled against a state of affairs which had become intolerable. Both Miss Knott and Miss Sanderson will leave the institution in Endell Street in April.

THE CATERING AT A MILITARY HOSPITAL.

THE sisters at the Colchester Military Hospital have been complaining through the medium of *Truth* that the catering is unsatisfactory. They are allowed 13s. a week for mess money and they think that the matron of the hospital does not spend this sum to the best advantage. *Truth* thereupon suggests that the messing should be supervised by a committee such as exists in connection with every other Service mess. We do not concur in this proposal. The matron of a hospital is the proper person to cater for the nurses, and how admirably fitted she is in some cases for this duty is shown by an article on another page in which the matron of a civil provincial hospital sets forth her experiences. It is impossible to criticise the Colchester matron's talents for catering without knowing how far she

is hampered by circumstances outside her control. Excellent diet should be forthcoming on the very liberal allowance quoted; nay, even on half that sum. The simple process of engaging a new cook and changing the butcher would probably work wonders.

CHARGE NURSES AND FEVER TRAINING.

WE are glad that the Irish Local Government Board stick to their guns, and, after the fullest consideration, have refused to alter the qualifications for the position of charge nurses, which therefore will now always include six months' training in a fever hospital. With reference to the contention of the medical officer at the Lurgan Fever Hospital that four months and a half in that institution should be considered sufficient, the Local Government Board are unable to reconcile the statement of the medical officer, that each probationer attended from fifty to sixty cases in four months, with the fact that less than thirty cases were treated in the hospital during six months. In any event, the Lurgan Guardians, we presume, will recognise that in the interests of their training school the determination of the Local Government Board must be respected.

TIDING OVER THINGS AT KING'S LYNN.

THE Mayor of King's Lynn announced at the last meeting of the Guardians that two nurses had been engaged for a time, "owing to the exceptionally large number of bad cases in the infirmary." But the Rev. A. H. Hayes, who thanked the Mayor for taking such a hopeful view of things, said it was singular that the exceptional circumstances had lasted more or less since the staff was reduced last August; and said that the wisest policy was to be always ready for any emergency. We agree with him; the tiding-over policy, which finds favour with a majority of the Lynn Guardians, is generally not only inefficient, but in the long run extravagant.

A MANCHESTER MATERNITY HOME.

At an inquest in Manchester the other day on the body of an infant found dead in a maternity home in that city the Coroner remarked that two years ago there was a similar case in the home. In this instance the mother took the child from its cot in the night, and the cause of death was asphyxia. It was stated, in the course of the evidence, that the staff at the home consisted of two nurses and a probationer, and that there was no nurse on duty during the night. The jury recommended that a night nurse should be provided. Compliance with this recommendation will obviate such dangers in



HOW TO BECOME A NURSE

MANY young women of the present day are, for one reason or another, attracted to Nursing as a career, but are at a loss to know how to enter the ranks of this important profession. "**How to Become a Nurse: The Nursing Profession, How and Where to Train,**" by Sir Henry Burdett, K.C.B. (price 2/4 post free), is the title of a most admirable work, which will be found to be a thoroughly reliable guide to this noble calling.

It contains a list of the recognised Training Schools throughout the English-speaking world, with particulars respecting Hospital, Infirmary, District, and Military Nursing, and answers very completely all the enquiries of aspirants who would fain believe that they have a vocation for Nursing.

It is well, however, before entering upon a Probationership, to obtain some knowledge of the duties of a Nurse. These are very fully explained in "**Nursing: Hints to Probationers on Practical Work,**" by Mary Annesley Voysey (price 2/3 post free). From this book a very clear insight may be gained into the character of the training it is necessary to undergo, and of the qualities that are absolutely essential to success in this self-sacrificing profession.

Having decided to adopt Nursing as a profession, it would be advisable, whilst waiting for a vacancy in the Institution of your choice,

or in the early stages of your probation, to acquire some knowledge of the elements of nursing, bandaging, and the structure and working of the human body. In this direction, "**Nursing: its Theory and Practice,**" by Dr. Percy Lewis (3/6 post free); "**A Practical Guide to Bandaging and Dressings,**" by Dr. Johnson Smith (2/- post free); "**Elementary Physiology for Nurses,**" by Dr. Marshall (2/- post free); "**Elementary Anatomy and Surgery for Nurses,**" by Wm. McAdam Eccles, M.S. (2/6 post free); and "**Elements of Anatomy and Physiology,**" by Dr. W. Bernard Secretan (2/3 post free), will be found most useful, and the information they convey is clear, concise, and accurate.

It is of course impossible to avoid the use of technical terms in such works as these, and it is therefore necessary that a good dictionary should be at hand for constant reference. "**The Nurse's Pronouncing Dictionary,**" by Honnor Morten (2/- post free), has been compiled especially for the use of Nurses, and contains the definition and pronunciation of most of the terms used in Medical and Nursing treatment. Its size also is a strong point in its favour, as it can very easily be carried in the apron pocket.

Another most useful work, and one it would be well to obtain, is "**Surgical Instruments and Appliances,**" by Harold Burrows, F.R.C.S. (1/8 post free). This book is of the utmost value to the Probationer, as by its assistance she will be able to readily identify the instruments and appliances used in various operations.

Many other important works on Nursing and kindred subjects will be found in the catalogue of THE SCIENTIFIC PRESS, LTD., who give almost exclusive attention to the production of Nursing Textbooks; and the fact that their publications are in use in the foremost Training Schools is indisputable evidence of their value.

THE SCIENTIFIC PRESS, LTD., 28-29 Southampton Street, Strand, London, W.C., will be pleased to send you, free of cost, on receipt of post-card, a copy of their latest Catalogue of Nursing Manuals, Charts, Case-Books, &c.

the future, but the second warning should not have been required. A maternity home without a night nurse is a survival of slipshod organisation which must no longer be tolerated anywhere.

THE CASE OF A SUPERINTENDENT NURSE.

It is a very unusual thing for an official who is working under the Local Government Board to persist in retaining a position which cannot be held with advantage when the presentation of a report by its inspectors is followed by an intimation from Whitehall that the post must be resigned. In the case of the superintendent nurse of the workhouse of the Auckland Union, the central authorities, while refusing to furnish her with extracts from the report submitted to them, made it clear that there is no slur on her character by expressing their readiness to sanction her appointment to the workhouse of some other union. We do not understand why, in these circumstances, the Auckland Guardians decline to give her notice, and have called upon the Local Government Board to do so.

THE INFIRMARY AND THE NURSING SOCIETY.

At the annual meeting of the Perth Sick Poor Nursing Society, which was held the other day, considerable astonishment was expressed that the directors of Perth Royal Infirmary have intimated their intention not to continue the contribution of £60, which they have annually made to the funds of the Society for the last twelve years for work done by the latter in nursing the outdoor patients of the infirmary. The Chairman of the Society, speaking as one of the large subscribers to the infirmary, said that he was somewhat surprised at the action of the directors of that institution, in suddenly cutting off their support from an Association which he might almost call a limb of the infirmary. But there was a pleasant note of confidence at the meeting that if the infirmary directors adhere to their determination, the public will make up the deficiency caused by the withdrawal of the grant. It was, of course, maintained that in such circumstances the society cannot afford to treat any of the discharged infirmary patients. Perhaps there is room for a compromise.

THE INSPECTION OF SCHOOL CHILDREN.

At the annual meeting last month of the Garston and District Nursing Association, lately affiliated to the Jubilee Institute, mention was made of the anxiety of the committee to secure a second nurse, who would be able to visit each school in Garston at least one day in the week, for the purpose of giving attention to, and reporting upon, the ailments of the children. Miss Amy Hughes, who was present at the meeting, having referred to the Garston Association as one of the oldest established in the country, said that all concerned would congratulate themselves upon the way in which the work was carried on. She emphasised the importance of children being inspected at school, and observed that "Liverpool has a leading position in regard to this special kind of work." We are glad to see that greater Liverpool, of which Garston forms an important part, seems determined to maintain that position.

POOR LAW PROBATIONERS AND SALARIES.

At a meeting of the Colchester Guardians a recommendation of the Infirmary Committee that the salary of an assistant nurse should be raised from £10 to £12 10s. at once, and from £12 10s. to £15 next year, was discussed at some length. The Chairman of the Infirmary Committee opposed the proposal on the ground that it looked like increasing the nursing expenses by a side wind, and another Guardian said that he did not think that the system of paying probationers a stated salary should be departed from. On the other hand, it was maintained that the probationer is a good "lifter," and is at present doing as much work as a nurse at a salary of £25; and in the end the increase was agreed to. In ordinary circumstances the salary of a probationer is, of course, fixed for the term she is serving, but at Colchester they are not engaged for a definite period. This being so, the Guardians were no doubt well advised in assenting to the recommendation of their Infirmary Committee; but it is, of course, far better to have a given time of training and a fixed rate of remuneration.

DISTRICT NURSES FOR NIGHT DUTY.

It is a very high compliment indeed to say of an organisation that its management is not capable of improvement. This, however, is the testimony given by Dr. Handcock at the annual meeting of the Bradford District Nursing Association, and it is the more noteworthy because Dr. Handcock has more opportunities than most people in Bradford of seeing how valuable the work of the nurses is in the homes of the poor. He thinks, however, that, while he could propose no improvement in the management, the institution is capable of extension; and he suggests that the provision of an extra nurse for night work would be a great boon. Under present circumstances, the poor people in Bradford who are taken urgently ill at night cannot get help. It is obvious that a district nurse, of all nurses, cannot work during the night as well as in the day, and we look forward to the time when not only Bradford, but many other District Associations will be able to afford to detail a nurse off for night duty.

MIDWIFERY IN LINCOLNSHIRE.

A FEATURE in connection with the operations of the Lincolnshire Nursing Association, whose annual meeting took place last Friday, with the Duke of Rutland as chairman, is that the importance of midwifery training is being increasingly recognised. When the Midwives Registration Act first came into operation the Chairman of the Lindsey County Council stated that of the ninety-one midwives known to be practising in Lincolnshire, only seven were registered. That number, we learn from the report of the Nursing Association, has now been almost quadrupled, and at the present time twenty-seven are registered, while the Nursing Association and the County Council are as quickly as possible training more nurses to receive the midwifery certificate. It is obvious that there is still a great deal of room for improvement, but we rejoice to observe that the managers of the county nursing organisation are taking up the work of aug-

menting the supply of trained midwives both sympathetically and systematically.

MISSION NURSES AND LITTLE HELPERS.

A PLEASANT little gathering was held the other day at the headquarters of the Biblewomen and Nurses' Mission, which has started a branch of juvenile workers under the name of "Little Helpers of the Poor." All the members of this Children's League living in London were invited. They were received by Mary Countess of Harrowby. Miss Andrews, the Hon. Superintendent, spoke of the work and aims of the League, and showed how much can be done towards helping and cheering the thousands of sick children to whom the Mission nurses go by means of a little unselfish thought, sympathy, and small sacrifices. Each member is expected to subscribe 6d. a year, and to fulfil one or two other simple conditions.

INCREASE OF A MATRON'S SALARY.

At the last meeting of the governing body of Radcliffe Infirmary, Oxford, the Treasurer, as Chairman of the Committee of Management, moved that the salary of the matron be increased from £120 to £140 a year. For nine years, he said, the present matron, Miss Wait, had been invaluable in the conduct of the place, and he did not think, if he looked all round Oxford, he could find a person who was more highly appreciated in the duties she discharged. The Rev. W. W. Merry seconded the motion, and after Mrs. Green had observed that they owed much to Miss Wait's tact, wisdom, knowledge, conduct of the nursing and of the domestic part of the infirmary, it was unanimously agreed to. We congratulate the matron upon the compliment paid to her, and all the more so because the Treasurer expressed his regret that the state of the finances prevented him from proposing a larger addition.

THE LATE SUPERINTENDENT OF THE LINCOLN INSTITUTION OF NURSES.

THE death of Miss Henrietta Bromhead, lady superintendent of the Lincoln Institution of Nurses, at the age of 59, deprives the nursing world in that part of the country of a conspicuous figure. Miss Bromhead, whose funeral took place on Tuesday last week, the service being held in Lincoln Cathedral, devoted 20 years of her life to the work which her mother originated in 1866. How largely it has developed may be gathered from the fact that the fortieth annual report shows that there are now 70 nurses on the staff of the institution. Our readers will remember that at the time of the epidemic of typhoid fever in Lincoln, two years ago, the nursing was placed entirely in the hands of Miss Bromhead. The account which appeared in our columns during the epidemic was written by her, at our request. In consenting, she expressed her desire that no prominence should be given to her own efforts, which, thanks to the hearty co-operation of her capable staff, were attended by remarkable success. The memorial of Lincoln to Miss Bromhead is already in existence. In the Jubilee year no less than £5,000 was collected in Lincoln in celebration of the reign of Queen Victoria and invested, the interest—about £140—being

assigned to the superintendent of the nursing institution to be used during her lifetime in aid of the district nurses.

A PIONEER OF NURSING.

THE death of Miss Jane Bowen, sister of Bishop Bowen, of Sierra Leone, at the age of 83, in the little village of Little Haven, merits mention in our columns, because it was through her efforts that the first Queen's nurse appointed after the Jubilee gift of Queen Victoria was sent to St. Bride's in that remote part of Pembrokeshire. For many years Miss Bowen herself acted as doctor, dispenser, and nurse, and the nearest medical aid is still seven miles off. But the presence of a Queen's nurse in the district has made a great difference, and is immensely appreciated.

THE MATRON OF THE BOLINGBROKE HOSPITAL.

WE are glad to hear that the matron of the Bolingbroke Hospital, Wandsworth Common, returned to her duties this week. Miss Russell has been recuperating at Hastings after her serious illness, and is now looking quite fit and well again. The nursing staff were extremely pleased to welcome her back.

DISTRICT NURSES AND THE DEATH-RATE.

At the annual meeting of the Lancaster Nursing Society this month, Mr. Helme, M.P., was one of the speakers. In proposing the re-election of the president, Mrs. H. L. Storey, he said that he did not think he was going too far to say that in Lancaster they owed the improved death-rate to the work of the district nurses in the homes of the poor. This is very valuable testimony of the Society's value to the town, and we are glad to learn that the financial condition of the Association is satisfactory. Both the subscriptions and the Church collections showed an increase last year, and the slight augmentation of expenditure was due to a rise in the salaries of the nurses in accordance with the rules. The number of cases nursed was 462, of visits paid 12,396, and the average cost of each visit 6½d. The number of visits paid per day by the nurses was 35.

ENTERTAINMENT TO BELFAST NURSES.

LAST week the nurses of the Belfast Union Infirmary were entertained by a number of friends, the entertainment commencing with a concert, which was held in the recreation-room of the Nurses' Home. Miss Ward, the superintendent of the nurses, rendered willing assistance and facilitated in every way the carrying out of an excellent programme. Subsequently the nurses and numerous visitors had a social reunion in the dining-room.

SHORT ITEMS.

LADY HERMIONE BLACKWOOD, President of the Belfast branch of the Irish Nurses' Association, gave an entertainment on the 4th inst., when she was "At Home" from 7.30 P.M. to 10 P.M.—A course of six lectures on "The Hygiene of Child Life" will be given by Miss M. Const. Barker, in the Lecture Room, 53 Berners Street, W., on Wednesdays, February 20 and 27, and March 6, 13, 20, and 27, 1907, at 2.30 P.M., under the auspices of the National Health Society.

The Nursing Outlook.

"From magnanimity, all fears above;
From nobler recompense, above applause,
Which owes to man's short outlook all its charm."

MAKE-BELIEVE IN BRITISH NURSING.

I. THE STAGE ARMY AND ITS MACHINERY.

It is announced that in June next there will be a conference held in Paris of the International Council of Nurses. It may be remembered that the last conference of the kind was held at Berlin, when there were present some thirty nurses from Great Britain, of whom only one, Miss Isla Stewart, was matron of a large London hospital, the other British delegates holding such positions as the superintendent of Sir Patrick Dun's Hospital, the matron of the General Hospital, Birmingham, the matron of Much Wenlock Hospital, the Queen's nurse from Surbiton, and a sister from the Royal Hants Hospital. The United States had a somewhat similar representation; Germany supplied a dozen members; and there were single delegates from France, Canada, Denmark, Holland, and Sweden. It may be interesting to examine the causes of the small attendance of Bristol nurses at Berlin in 1904.

An instructive sidelight on the hollowness of the machinery upon which this International Council rests, so far as Great Britain is concerned, is supplied by the publication of what purports to be the annual report of the Matrons' Council, submitted to a meeting held on January 31st, to which reporters were not invited. This document exhibits the reasons why no doubt publicity is not sought for the proceedings of this body, why no list of its members can be obtained, and why British nursing is made to look so ridiculous in the eyes of other countries through the folly of a few ambitious spirits, whose prime movers are mostly ex-matrons, that is, ladies who have retired from active participation in the education and training of nurses. It is noticeable that the ambitious spirits in question display exceeding modesty so far as publicity is concerned, when they hold a meeting of the so-called Matrons' Council, on which, it will be seen, the whole superstructure of the British end of the International Council and of the National Council of Nurses in reality rests.

Who then are the Matrons' Council? The only information forthcoming on this point is to be found in an advertisement which has been running in practically the same form for some thirteen years. The advertisement contains the names of Miss Isla Stewart, the president, of three ex-matrons, including Mrs. Bedford Fenwick, and of the matron of the General Hospital, Nottingham, the Royal Hants Hospital, Southampton, and the Infirmary, Leicester. The Honorary Secretary is Miss M. Breay, and the report indicates that Mrs. Bedford Fenwick

and Miss Breay in fact supply most of the initiative and do most of the work. No report or statement of accounts appears to be published by the Matrons' Council, but its financial position is indicated by a statement that, the balance in hand at the moment is under £9. In the report referred to we get a clear description of the stage army and its proceedings. Thus, the Matrons' Council, on July 1st, 1899, on Mrs. Bedford Fenwick's initiative, resolved to organise an International Council of Nurses. In 1900 the constitution drafted by these ladies was adopted, and Mrs. Bedford Fenwick was elected first President of the Council. The first meeting of this International Council (?) was held in Buffalo in 1901, the second in Berlin in 1904, and the third is to be held in Paris in June next. On October 26th, 1899, on the motion of Mrs. Fenwick, the Matrons' Council decided to form a provisional committee to organise a National Council of Nurses, such provisional committee consisting of the executive of the Matrons' Council. The Executive relegated the matter to a sub-committee consisting of Miss Isla Stewart, Mrs. Fenwick, and Miss Breay. At the annual meeting of the Matrons' Council in 1900 the report of this sub-committee was under consideration, together with a draft constitution of the so-called National Council of Nurses. The National Council idea would appear to have then halted in its progress until 1904. In the intervening years the Matrons' Council endeavoured to organise Leagues of certificated nurses in connection with their training schools, and ultimately Miss Isla Stewart summoned a conference of delegates of such leagues, which recommended the constitution of a National Council, when 5,000 nurses were represented by delegation. On November 25th, 1904, before apparently the National Council could be constituted on the basis recommended, for the reason that delegation by 5,000 nurses could not be secured, the provisional committee affiliated itself with the International Council of Nurses. It is therefore doubtful whether at the moment England is blessed with a National Council of Nurses, or whether it is merely a provisional committee of the Matrons' Council which has affiliated itself with the International Council. In 1902 the Matrons' Council instituted the Society for the State Registration of Trained Nurses.

It would thus appear that the Matrons' Council besides other things, is, for practical purposes, the National Council of Nurses, the Society for the State Registration of Trained Nurses, and the British Section of the International Council of Nurses. That is to say, these eight ladies—some of whom are not now actively engaged in nursing—calling themselves the Matrons' Council, constitute, in fact, the bone and sinew of all these high-sounding Councils and Societies. Could make-believe in nursing be more humorously exhibited for the laughter of the whole profession throughout the world!

The Care and Nursing of the Insane.

By PERCY J. BAILY, M.B., C.M. Edin., Medical Superintendent of Hanwell Asylum.

II.—NURSING THE SICK.

(Continued from page 263.)

Enema.—Any liquid preparation which is introduced into the bowel is called an enema. The purposes for which an enema may be ordered are very various, and the form and size of the injection and the apparatus required for its introduction into the bowel vary with the purpose for which it is used. There are three chief varieties of enema, which are: (1) purgative; (2) medicinal; (3) nutritive.

(1) *Purgative enema.*—The object of these is to clear the bowel of its contents. The commonest kind of purgative enema consists of a large amount of fluid—from one to two pints, or even more—which is injected into the bowel by means of a Higginson's syringe. In some cases, when very large quantities of fluid—as much as two quarts are sometimes given—are to be used it is convenient to have an india-rubber tube (a No. 12 catheter) attached to the nozzle of the syringe. The position of the patient should be the same as already described for the administration of a suppository, but the buttocks should be raised on a pillow and the head should be low. Over the pillow on which the buttocks rest a mackintosh sheet covered with a draw-sheet should be arranged in order to protect the bed. All the bed-clothes should be turned back so as to be out of the way, the patient being covered with a blanket. The enema should be prepared in a deep basin so that the end of the tube of the Higginson's syringe may be always covered by fluid; and must be heated to near the temperature of the body—about 95° F. The temperature must be tested with a thermometer. The basin containing the enema should be placed in a convenient position on a small table or stool near the side of the bed. The nozzle of the syringe or the india-rubber tube, if one be used, should be oiled and the syringe filled with the fluid, whatever it may be, so that there may be no fear of pumping a syringe full of air into the bowel before the enema. The nurse standing at the patient's back must then pass the index finger between the patient's buttocks until the anal orifice is found, and with the right hand insert the nozzle or tube into the rectum. The first reflex contraction of the sphincter which always takes place as soon as the tube reaches the anus very soon relaxes, and the tube will then readily enter. It should be remembered that the direction of the bowel is not directly upwards from the anus, but inclines rather backwards and towards the left, and that no real force should be necessary to make the tube pass through the anus. Special care should be exercised by the nurse during this part of the operation when an india-rubber tube is used, and which is intended to enter the bowel to the extent of some six or eight inches, for if any great force be employed there is a risk of piercing the wall of the rectum, and of subsequently pumping the enema into the peritoneal cavity—an accident which would inevitably set up fatal peritonitis. When the nozzle has been satisfactorily inserted the enema is slowly and steadily pumped into the bowel. If this part of the opera-

tion is performed too quickly there is a danger of its being at once expelled, and the object of the enema thus frustrated. The time occupied should be from three to five minutes to each pint. When the whole of the enema has been passed into the rectum the tube must be gently withdrawn, and a warmed towel should then be pressed against the anus for a few minutes. The object of doing this is to help to overcome the almost irresistible desire the patient experiences to expel the enema at once. It should be retained in the bowel for 10 or 15 minutes if possible, when the patient, if he is able to get out of bed, should be placed on the night stool. If he is unable to be removed from the bed a bed-pan must be placed under him.

After the administration of a copious enema there is a danger of the patient fainting, and the nurse should be prepared for such an eventuality.

The ordinary purgative enema for use in cases of constipation should consist of two pints of soap and water for an adult; for a child of four or five years from four to six or seven ounces may be used. To this may be added for an adult three or four ounces of turpentine—or very thin gruel may be used either alone or mixed with from three to eight ounces of olive oil, or with two ounces of castor oil, or the basis of the enema may consist of thin starch.

Small quantities—one or two drachms—of glycerine may be injected into the rectum to produce a purgative effect. For this purpose a special form of syringe, usually made of vulcanite, is necessary. It produces a natural motion in about half an hour. Glycerine is apt to give rise to some discomfort, amounting in some cases to a severe burning sensation.

(2) *Medicinal Enemata.*—These may be used for a variety of objects, the amount and the composition of the enema depending upon the effect which is desired. Usually, but not invariably, medicinal enemata are used in order to produce some local effect upon the bowel.

The chief varieties of this class of enema are the following:—

(a) *Sedative.*—These are given for the purpose of relieving pain or spasm in cases of severe diarrhoea, dysentery, or other painful conditions of the lower bowel. This kind of enema is intended to be retained in the bowel, and is therefore always small in amount. The best example is the starch and opium enema (enema opii) of the British Pharmacopoeia. The best apparatus to administer it with is an ordinary two-ounce glass syringe, to the nozzle of which is attached a few inches of a No. 12 rubber catheter.

(b) *Astringent.*—These enemata consist of solution of various metallic salts, such as nitrate of silver (5 grains to a pint), sulphate of zinc or sulphate of copper (1 grain to an ounce). Naturally the choice of these does not lie with the nurse, but she should have an intelligent interest in their composition and uses. They are given usually in comparatively large quantities, and the rules for their administration are the same as those for an ordinary purgative

enema. Dysentery is the chief disease in the treatment of which they are ordered.

(c) *Enemata for destroying intestinal worms.*—The common thread worm is the parasite most readily treated by means of rectal injections, which may consist of a solution of table salt. Two teaspoonfuls to half a pint of water—or spirit of turpentine 3ij to 3iij mixed with the yolk of an egg in 3iv. of water or infusion of quassia 3j to half pint of water. These injections are best given with an ordinary Higginson's syringe, or with the apparatus which will shortly be described, when dealing with the nutrient enemata. In every case, before the enema is administered, the preparatory treatment ordered by the medical attendant must be carefully carried out. This consists in the administration of an ordinary purgative enema or a dose of castor oil or other purgative, so as to clear the lower bowel of any faecal accumulation. The patient must always be directed to retain the enema as long as possible,

and for this reason the amount given is never to be very large—usually about half a pint—never more than one pint.

(d) In the treatment of epilepsy, when the patient passes into what is known as the status epilepticus—that is to say, when the fits follow one another so rapidly that there is no appreciable interval between them—an enema consisting of a solution of chloral hydrate is occasionally ordered. It should not be larger than an ounce or an ounce and a half, and should be given with a glass syringe and tube as recommended for sedative enemata. Before it is administered the bowel should be cleared out by means of a purgative enema. Whenever such an enema is ordered it must be given without delay, because the effect of chloral hydrate upon the heart is to depress it, and necessarily this vital organ is very much weakened in a patient who is having a succession of fits, the weakening of the heart being a progressive process so long as the fits continue.

The Nurses' Clinic.

VAGINAL OVARIOTOMY CASES.

THE operation of ovariectomy for disease of one or both ovaries is sometimes done per vagina. The preparation of the patient for the above operation is as follows:—The parts must be shaved and the patient must have a warm bath. An aperient must be given about midday on the day previous to that of operation, and a soap and water enema, and antiseptic vaginal douche that same evening and the next morning. It is well to give a wash-out enema and vaginal douche again, if possible, within an hour before operation.

The patient must have a very light breakfast, not less than four hours previous to operation; she must pass urine immediately before going to the operating theatre, and must be warmly clad in a dressing-gown and long stockings, a blanket being spread over her body when on the operating chair. She will be operated on in the lithotomy position.

The surgeon will require the following instruments, etc.:—Irrigator (with warm antiseptic solution), douche nozzle, catheter, speculum, scalpel, vulsellum forceps, ovum forceps, artery forceps, dissecting forceps, pedicle needle, small curved needles, needle-holding forceps, ordinary straight or angular scissors, long uterine scissors, strong silk or catgut ligatures, plugs of iodoform gauze (for packing the vagina), swabs of sterilised gauze, pads of gamgee, antiseptic solution, sterilised towels, and T bandage.

When the patient is put back in bed she must be kept warm by hot-water bottles and blankets, her knees being supported by a pillow.

There will probably be a gradual oozing of hæmorrhage from the vagina for the first few hours after operation; the nurse must look from time to time, changing the pads, sponging the parts with warm water and drying thoroughly, drawing the sheet if necessary so as to keep the patient dry and comfortable. Unless the hæmorrhage becomes excessive there is no cause for alarm, and in that case the doctor in charge must be informed without delay.

The nurse is usually instructed by the surgeon to remove the vaginal plugs about twenty-four hours after the operation; if more than one plug has been used care must be taken that all have been removed. Vaginal douching is then commenced and usually continued, at least once daily, for from ten days to a fortnight.

The patient will probably be allowed to get up in less than a fortnight after the operation. Ordinary light diet may be given as soon as the patient has recovered from the anæsthetic sickness. An aperient is usually given on the first day after operation, and after that when necessary. Patients who have had this operation have sometimes a little difficulty in passing urine themselves for the first day or two; in this case the catheter may be necessary, but not oftener than eight hourly, and then with the utmost surgical cleanliness being observed on the part of the nurse.

Incidents in a Nurse's Life.

A PATIENT AT THE HOSPITAL FOR INVALID GENTLEWOMEN.

THE *fiat* had gone forth. I must undergo a serious operation, and that without loss of time. My doctor sent me up to a London surgeon, who told me to apply for admission to the Hospital for Invalid Gentlewomen in Harley Street. I did so, and, after a brief delay—having meantime found a substitute to take my place—I was told that there was a vacancy for me. Accompanied by a friend, I went to the hospital, where, on arrival, I was met by the matron with a most kind welcome, and was not even allowed to carry my handbag upstairs. I was introduced to my nurse and shown the room allotted to me. It was wonderful to

me how all the horror and dread, which had been weighing me down ever since I had heard the verdict, seemed to slip from me never to return, as soon as I had set foot within the hospital. There was something in the air of the place which reassured me. My room was large, long, and airy, and situated at the top of the building. There was an additional window, looking on to the stairs, an arrangement I found occasion to bless, as I was thereby enabled to hear much of the service held in the cubicles below on Sunday evening.

My operation took place at 8.15 on the morning after my arrival, and for two days afterwards I was naturally rather miserable, and for about ten days underwent the—to me—

INCIDENTS IN A NURSE'S LIFE—continued.

entirely novel experience of utter helplessness. During all this time nothing could exceed the kindness and attention I met with on all sides. A bell was attached to me, which I was bidden to ring whenever I wanted anything, and it always seemed to me that the nurses must have been waiting outside the door, so promptly did they answer the summons, and always with a cheerful smile, as though pleased to do anything for me. The day after the operation my first visitor was admitted, for five minutes only; subsequently my friends were allowed to stay longer, and often had tea, which was provided for a small payment.

One of the Sundays while I was at Harley Street happened to be Hospital Sunday, and we received gifts of flowers and fruit from a neighbouring church, and were

ourselves enabled to contribute to the Fund, as a collecting-box was brought round. There was in addition an early celebration once a week for any patients who were well enough. On my last Sunday I came down to the service, and was installed in an arm-chair, and forbidden with dreadful threats to stir from it till the close of the service. At last, after seventeen days, came the time for my departure, and I was truly sorry to leave all my kind friends, to whose care and attention I feel that I owed my speedy recovery. My time in the hospital, too, did me good in more ways than one, and was a real rest after the year's work, and also I am sure that my patients will benefit from my experience, as I learnt much I shall never forget by seeing the other side of the shield.

The Cost of Catering in a Provincial Hospital.

BY A MATRON.

It is an interesting question whether the cost, generally speaking, of catering for a provincial hospital is greater than that for a London hospital.

For three years I catered in a London hospital of 100 beds, and for two and a half years I have been a matron in the provinces, and I find that I can provide better food at a smaller cost per head in the provinces than I could in London. The meat here is English and of good quality. In London we used foreign meat, also of good quality, but wanting in the flavour, which is found in English meat. In London nearly all goods were had at contract price. Here we contract for meat, bread, bacon, and milk only.

The following table shows the prices for meat compared to what we paid in London:—

| PROVINCES. | | LONDON. | |
|---------------------------------------|---------|-------------------------|---------|
| <i>English.</i> | per lb. | <i>Foreign.</i> | per lb. |
| Mutton, all parts ... | 6½d. | Mutton, leg ... | 5d. |
| Veal, all parts ... | 6½d. | Mutton, shoulder ... | 4d. |
| Pork, all parts ... | 6½d. | Mutton, neck ... | 3d. |
| Beef, all parts ... | 6½d. | Beef, sirloin ... | 5d. |
| Beef-tea meat (shin without bone) ... | 4d. | Beef, steak ... | 6d. |
| Shin without bone ... | 4d. | Beef, shin, no bone ... | 3d. |
| Beefsteak ... | 6½d. | Pork ... | 6½d. |
| | | Veal ... | 7d. |

At this hospital the cost of meat per head for the year ending June, 1905, was £4 3s. 4d., and in the year ending June, 1906, it was £3 13s. 2d. In the year ending June, 1905, 68, and in the year ending June, 1906, 57 persons was the daily average. This includes patients and staff. I account for the decrease in the cost per head by the fact that the number of beds available has decreased, and the convalescence of the patients was consequently shortened owing to the pressure on the beds. Thus there were fewer patients on full diet. The meat allowance for patients is, men 4 oz. cooked, women 3 oz. cooked. This I carved and weighed myself daily.

The small average cost per head as compared to London hospitals is partly accounted for by the fact that in the London hospitals there is a larger staff of men to be fed—doctors, clerks, dispensers, porters. Here there is only one resident doctor and a dispenser, who has lunch twice a week. The porter lives in the lodge and has no food provided. The presents from friends of the hospital are a great help. In the year ending June, 1905, 40 rabbits and 80 pheasants were received, and in the year ending June, 1906, 121 rabbits and 59 pheasants were received. I think quite as many were received in the hospital in London where I catered, but I have not kept a record of the number.

With regard to butter, we have it from a farm, and for this we pay market price. It is excellent and all have the same. The following table shows the market prices for the year ending June, 1906:—For 5 weeks, 11d. per lb.; for 4 weeks, 1s. per lb.; for 5 weeks, 1s. 1d. per lb.; for 11 weeks, 1s. 2d. per lb.; for 2 weeks, 1s. 3d. per lb.; for 15 weeks, 1s. 4d. per lb.; and for 10 weeks, 1s. 5d. per lb. The average cost per lb., 1s. 2½d. The cost of butter per head per week for the year ending June, 1906, was, therefore, 6½d. The allowance per patient of 6 oz. I do not always find sufficient, so that it is increased when necessary. The servants have an allowance of ½ lb. per head per week. For the nurses there is no allowance, and I find that they consume about 10 oz. per head per week. Very little butter is used for cooking; ¼ lb. per week is the maximum. Lard and dripping are employed instead.

In London the contract price for butter was 1s. 2d. per lb. fresh, and 1s. per lb. salt. While I was in the metropolis I found the butter account most difficult to manage. The nurses used 14 oz. per head per week, and the cook used 7 and 8 lbs. a week for cooking purposes.

Potatoes are sent in large quantities from the harvest festivals in the neighbouring villages, so that the small sum of £5 4s. 7d. was all that was spent on potatoes in the year ending June 1906 as compared with £30 in the year ending June 1904. Vegetables and apples are also received from the churches; about one-fourth of what we use comes to us as gifts. As to eggs, we preserve them in water-glass, buying them when we can get twenty for a shilling. Including the water-glass the total cost is £4 7s. 8d. to preserve 1,600. When eggs are very dear we buy only a few new-laid for special use. We do not boil these preserved eggs, but only poach and fry them. In London the contract price for eggs was 1d. each. When eggs were plentiful they were fresh, and when eggs were dear they were not.

On first coming to this hospital I found the fish bill a difficulty. I could obtain very little fish under 7d. and 8d. per lb., and as the town is on a tidal river and only seven miles from the sea I thought this too much. The one fish-shop had a monopoly. In a short time I heard of a woman whose sons are fishermen, and she now brings fish daily, and charges 4d. per lb. for all the common varieties—cod, haddock, whiting, lemon-soles. The fish is beautifully fresh, and it is frequently delivered alive.

For fowls we pay market price. This varies from 2s. 3d. to 3s., according to season, for fowls weighing 2½ to 4 lb. each. In London we had a contract, and paid 2s. 9d. each.

Milk is 2½d. per quart in summer and 2½d. in winter.

In London it was 2½d. in two-gallon cans, sealed, and 4d. per quart in sealed bottles.

The grocer's bill has been much lessened by the pound day collections from the villages and town. The following were received:—Tea, 100 lb.; sugar, 653 lb.; rice, 200 lb.; tapioca, 100 lb.; cornflour, 50 lb. The money saved in consequence I reckon at about £30. We pay more for groceries than in London. As we make our own jam and marmalade we save in this way. The average cost for making this is 3d. per lb. We pickle onions and red cabbage, and make marrow and apple chutney. We also make our own potted meat. I have been treated in a most generous way by my committee, who have allowed me to purchase goods that were not by contract where I thought best. In consequence of thus having a free hand I am able to study the provisioning in every light. By means of constant attention to detail, by personally supervising to see where waste occurs, and by the help of a good economical cook, I was enabled in my first year to reduce the total cost of provisions to £254 18s. 7d. less than the previous year. This, too, was with an increased staff of nurses and servants. There is a generous diet both for patients and staff, and we endeavour to vary the menu as much as possible, having no fixed days for certain things. The total cost of provisions per head per week is 4s. 7d. Subjoined is a three-days' diet-sheet for the nurses:—

TUESDAY.

Day Nurses.

Breakfast: Fried bacon, tea, bread-and-butter.
Lunch: Coffee, hot and cold milk, bread, cheese, beef-dripping.
Dinner: Roast beef, greens, potatoes, baroness pudding, cup of tea after.
Tea: Tea, bread-and-butter, marmalade.
Supper: Cold pork, cold mutton, beetroot, bread-and-butter, milk pudding, hot coffee, and cold milk.

Night Nurses.

Breakfast: Fried bacon, bread-and-butter, tea.
Night Meal: Soup, sardines, tea, bread-and-butter, jam.
Dinner: Chops, tomatoes, potatoes, cake pudding.

WEDNESDAY.

Day Nurses.

Breakfast: Kippers, bread-and-butter, tea.
Lunch: Coffee, hot and cold milk, bread-and-cheese, treacle.
Dinner: Steak pudding, haricot beans, potatoes, milk pudding, tea after.
Tea: Bread-and-butter, tea, and jam.
Supper: Soup, cold beef, pickles, bread-and-butter, hot coffee, cold milk.

Night Nurses.

Breakfast: Kippers, bread-and-butter, tea.
Night Meal: Eggs, porridge, bread-and-butter.
Tea: Marmalade, coffee.
Dinner: Sirloin of beef, greens, potatoes, boiled suet pudding and treacle.

THURSDAY.

Day Nurses.

Breakfast: Sausages, bread-and-butter, tea.
Lunch: Coffee, hot and cold milk, cheese, biscuits, bread.
Dinner: Roast mutton, greens, potatoes, jam tarts.
Tea: Bread-and-butter, jam.
Supper: Fish pie, cold beef, coffee, hot and cold milk, bread-and-butter.

Night Nurses.

Breakfast: Eggs.

Night Meal: Sausage-rolls, milk pudding, bread-and-butter, tea, coffee.

Dinner: Steak, greens, potatoes, baked batter pudding.

The above diet is for three days in winter. In summer eggs are more frequently given, no sausages, and in the hot weather cold meat and stewed fruit. The nurses have cake for tea on Sunday only.

The Brooklyn Institute for Nurses and Nursing.

THE advent of the trams compelled Mrs. Cameron, the Superintendent, after nine years' residence in Anerley, to seek other quarters for her Institute, and shortly after Christmas patients and nurses took up their residence at their new abode, 2 Sydenham Avenue, Crystal Palace Park Road. The large house stands well back from the road in its own grounds. Originally a school, it is admirably adapted for its present purpose and affords accommodation for eight patients, the staff, such private nurses as may be temporarily resident, and servants. In the grounds are a tennis and croquet lawn and a poultry run, whilst there are plenty of quiet corners where patients may sit with the comfortable assurance that they cannot be overlooked. The dining-room has three French windows leading on to a balcony, and here too the patients can sit when they can come down, in restful chairs. Some of the patients' bedrooms are very commodious, others smaller, but all bright and pleasant-looking and of a good height. There are a small operating-room and a kitchen upstairs. The private nurses have a sitting-room which is in the school part of the house and consequently quite separate. Their boxes and chests of drawers are kept in what was the gymnasium, and the stock boxes in a cottage in the grounds. There are twenty-five fully trained nurses on Mrs. Cameron's books, and it is rarely that there are any in. The staff consists of the home sister, a charge nurse, a night nurse, and a probationer. Accommodation for nine private nurses is always ready in the Institute, but there are two emergency beds in case of necessity. The Brooklyn Institute has been full ever since the move.

Infants' Weight Chart.

(W. H. BAILEY AND SON, LIMITED, 38 OXFORD STREET, W.)

THIS is a useful chart for recording graphically a child's weight each week during the first year of life and comparing it with the average weight for the same week. Most bottle-fed babies suffer for a time from more or less flatulence and slight digestive disturbances, although really doing well and gaining weight. In such cases the chart may bring solace to the troubled mind of a mother over-anxious about her first-born; for, sad to say, the frequency with which infants are regularly weighed usually varies inversely with the number of older children in the family. On the other hand, a fall in weight to below the average for the child's age may in good time direct attention to the fact that his food is inadequate, although he may apparently be thriving. Judging from its size, the chart is intended to be fastened to the nursery wall, for if a piece of paper so large and thin is left about the room the child may survive the perils of the first year but the chart probably will not.

Illustrations of the Life of a Modern Nurse.

LIFE IN A FEVER HOSPITAL.



A WARD AT THE PARK HOSPITAL, HITHER GREEN.

ON DAY DUTY.

Dr. Hutchison on Infant Feeding.

A LARGE audience, of whom a great many were nurses, gathered at the Institute of Hygiene on Wednesday last week to listen to a lecture on "Infant Feeding" by Dr. Robert Hutchison, M.D., F.R.C.P. After dwelling on the importance of natural feeding wherever it was possible, Dr. Hutchison proceeded to discuss the different methods of artificial feeding that might be followed. When cow's milk is used for a child he recommended its dilution with not more than an equal quantity of water. It is true that with some children this mixture does not agree, but he did not believe that better results were to be got by a greater dilution, which only made the milk too watery without getting over the difficulty of getting rid of the superfluous casein, the presence of which could always be detected by the child having sickness, colic, and unhealthy motions. Dr. Hutchison suggested various expedients for increasing the digestibility of cows' milk in cases where the half-and-half mixture did not give satisfactory results.

1. **CITRATED MILK**—i.e., the addition of citrate of soda, which is a harmless vegetable salt, to the food in the proportion of 1 grain of the soda to 1 oz. of milk—that is, to 2 oz. of the half-and-half mixture. He admitted, however, that there were certain objections to the use of the salt, and that it was best to employ it only under the direction of a medical man.

2. **CONDENSED MILK**.—If the citrated milk failed to give satisfactory results, it would be necessary to fall back on some good brand of condensed milk, of which there are several on the market. He recommended the sweetened preparations, as the unsweetened do not keep after the tin has been opened. He also advised his hearers to disregard entirely all the directions on the tins. As to the proportions to be used, he recommended a mixture of one teaspoonful of milk to six tablespoonsful of water. This mixture was almost right as to the proportion of casein, but was comparatively poor in fat, but the addition of a teaspoonful of cream would make a combination that would be something very like human milk. While the preparation would in most cases give satisfactory results, the use of it should not be continued too long. The outside limits would be the age of four months, and if this kind of feeding was prolonged there was a risk of the child developing rickets.

3. **DESICCATED MILK**.—This is a form of milk that is not yet well known, but Dr. Hutchison predicts a future of great usefulness for it. It is at present difficult to obtain, but is both convenient and valuable. Many children can digest a good deal of desiccated milk, when the same quantity of cow's milk would disagree.

4. **PEPTONISED MILK**.—Where the child is so delicate that none of these forms of milk can be digested, one must fall back on peptonised milk, the pepsin being added to the half-and-half mixture. But Dr. Hutchison warned his hearers that if a child was sufficiently ill to need this kind of food, it was sufficiently ill to require the care of a doctor.

With regard to the time of feeding, he gave the following table:—

TIME-TABLE FOR FEEDING.

| Age. | Intervals by Day. Hours. | Number of Night Feeds. | Approximate Quantity at Each Feed. Ozs. |
|-------------------|-----------------------------|------------------------|--|
| 1 week ... | 2 ... | 2 ... | 1 to 1½ |
| 2 to 3 weeks ... | 2 ... | 2 ... | 1½ to 3 |
| 4 to 5 " ... | 2 ... | 1 ... | 2½ to 3½ |
| 6 to 12 " ... | 2½ ... | 1 ... | 3 to 4½ |
| 3 to 5 months ... | 3 ... | 1 ... | 4 to 5½ |
| 5 to 9 " ... | 3 ... | — ... | 5½ to 7 |
| 9 to 12 " ... | 3½ ... | — ... | 7½ to 9 |

As to the amount to be taken at any one meal, he advised that this matter should be left to the baby. The appetites of adults were not all alike, and neither were those of infants. He also advised a simple oval bottle, with a plain rubber teat, and deprecated the putting of too much trust on valves and other contrivances to regulate the pressure. It is important, however, to see that the hole in the top of the teat is big enough, and not too big. If it is too large the child is fed too fast; if it is too small the baby has to exhaust itself in sucking. A safe test is that if, when the bottle is held upside down, the milk drops out at the rate of a drop per second, the hole is the right size.

A Middlesex Hospital Nurse and the Jamaica Earthquake.

MISS S. CROSS, a nurse attached to the private staff of the Middlesex Hospital, who went out to Jamaica in the *Port Kingston* with a patient, was able to render the most valuable service in nursing the sufferers from the earthquake who were conveyed for treatment on to the boat, which, for the time being, was converted into a floating hospital.

To our representative she described the scene on arriving on board as one of fearful confusion. "The injured were strewn all over the decks, some already dead, the crew running to and fro to find mattresses and rugs. Another bargeful arrived a little later, but the officer called Dr. Evans down to see them before he unloaded, and several were dead, so those were taken back to the shore." Asked if she saw anything of the Mildmay nurses, or any other doctors or nurses, she said "No, they were busy on shore, and Lady Swettenham was helping them, and we had not a minute to spare after we got to work. Most of the injuries were terrible, and the anaesthetics gave out long before the operations were finished. We gave them all an injection of morphia afterwards, and one woman whose face was cut open, and her eye actually laid out on her cheek, bore the sewing up with no anaesthetic without a murmur, but as soon as she saw the hypodermic needle she shrieked with terror."

Miss Cross found the officers and crew most helpful, and says that they worked all night too. In fact, no one got much rest till after the boat left the harbour. The last day was a very busy one, as all the patients had to be moved from the vessel to the sheds which had been temporarily erected on the banana wharf. They were laid on a mattress placed on a shutter, which was then raised at the four corners by the crane, and lowered into the barge alongside. Eight of the injured were among the passengers, and so had to be nursed on the homeward voyage, besides one girl, who suffered from typhoid. One patient had received a severe injury to the knee. A little boy had both legs broken, and as his father and mother had lost everything in the fall and burning of their house, and were penniless, Sir Alfred Jones brought them home to their relations in England. The mother was injured in the shoulder by a falling beam, but the injury was not observed for a day or two till suppuration commenced. This happened in several otherwise minor cases, in consequence of the dirt being so ground in by the weight of the falling timber. The medical stores naturally ran very short on board, but fortunately there was a lot of carbolized tow among the ship's goods, so the splints were padded with that, and the sheets were torn up for bandages.

At present Miss Cross is resting, and the matron of the Middlesex Hospital, says that until she is eating and sleeping well and her nerves are thoroughly restored she will not resume her nursing work.

The Royal Infirmary of Edinburgh.

RESIGNATION OF THE LADY SUPERINTENDENT.

MISS SPENCER, having intimated her intention of relinquishing her duties at June 30 next, the managers have minutened their appreciation of her services and their regret at her retirement in the following terms :—

"The managers have received with much regret the letter of Miss Spencer, Lady Superintendent of Nurses, announcing her intention of retiring from her post on June 30 next, on which date she will have completed thirty years of service in the Royal Infirmary, and they desire to place on record their high appreciation of her work during this long period.

"Entering the service of the Royal Infirmary in 1877 as assistant to Miss Pringle, the then Lady Superintendent, Miss Spencer during ten years discharged her duties with such conspicuous ability and aptitude that in 1887 she was unanimously chosen by the managers to succeed Miss Pringle, who had received another appointment. Throughout the whole twenty years Miss Spencer has held the office she has given such unwearied, devoted, and whole-hearted attention to its duties as to call forth the admiration of all who have had opportunity of observing and knowing the amount and character of the work she has had to do. During this period, which has witnessed a large extension of the infirmary, the manner in which Miss Spencer, in the midst of her difficult and responsible duties, has met the increasing demands upon the nursing and domestic arrangements has been such as none but one specially gifted for the work could have done.

"Recognising as they do that the reputation and success of the Royal Infirmary as a house of healing for the sick and suffering depends in a large measure upon the equipment and efficiency of its nursing staff, the managers have great satisfaction in recording their warm appreciation of Miss Spencer's unceasing efforts by careful selection, by improved methods of training, and by attention to all that pertains to the comfort and well-being of the nurses, to raise this department of the infirmary's work to the high position it now holds. Further, the managers have had, during all Miss Spencer's period of service, the gratification of observing the high tone which pervades the whole department of which she has the oversight. They feel that this is eminently due to the influence of her personal Christian character and example, her wise supervision, and to the lofty ideals of the noble and sacred calling of a nurse which she has at all times striven to set before those who were, or came to be, under her charge.

"The managers trust that the sorrow Miss Spencer cannot fail to feel at leaving the work so near to her heart may be mitigated by the knowledge that she has been privileged to give her best years to a calling and a cause worthy of life's highest ambitions and energies; and that she carries with her the affectionate regard not only of the present nursing staff, but of many hundreds of nurses in all parts of the world who have been trained under her care. The managers assure Miss Spencer of their genuine gratitude, their high esteem, and their cordial wishes that all good may attend her in the future.

Presentations.

BARMOUTH NURSING ASSOCIATION.—The Committee of the Barmouth and District Nursing Association have presented a gold watch to their Queen's Nurse, Miss Elizabeth A. Jones, who has carried on the work in the district for ten years (being the first nurse), in appreciation of her excellent work.

Everybody's Opinion.

A PROBATIONER LOSES HER SIGHT.

"POLICY 192, ROYAL NATIONAL PENSION FUND FOR NURSES," writes: Please give the half-crown enclosed to the probationer of West Ham Infirmary who lost the sight of one eye. I sincerely sympathise with her.

NURSE RUTH, Glasgow, writes: May I ask you to add the enclosed small contribution of 15s. to the fund for the nurse who recently lost her eyesight while she was in attendance on a "typhoid" patient at West Ham Infirmary? If anything can comfort her for the loss of the work she loves it will be the thought that she did her duty unflinchingly, and I should like to offer her the assurance of my respect as that of a sister-nurse who hopes that she would be able to forget "self" as generously under similar circumstances.

NURSES AND THE WORKMEN'S COMPENSATION ACT, 1906.

MR. S. BUCHANAN SMITH, Secretary, The Infirmary, Salisbury, writes: There seems to be some doubt whether the provisions of the above Act would apply to the nurses of a hospital, and the committee of this infirmary would be glad to know the views of the officials of London and other hospitals on the matter. May I therefore ask the favour of the question being ventilated in *THE HOSPITAL* with the object of ascertaining the general opinion as to whether the authorities would be liable under the above Act in case of accident, fatal or otherwise, to nurses (paid and unpaid) while in their employ?

[There can be little or no doubt that hospital nurses, including probationers, come within the definition of "a person who . . . works under a contract of service or apprenticeship with an employer." So long, therefore, as a nurse's remuneration is less than £250 a year she is entitled to claim the benefits conferred by the Act. It should, however, be remembered that her employers would only be liable for "accidents arising out of or in the course of her employment," and that this would not (in the case of a hospital nurse) include diseases contracted while nursing, unless directly attributable to a previous accident, such as a cut finger resulting in blood poisoning. The risk incurred by hospital authorities is one that they should certainly insure against.—ED. *THE HOSPITAL*.]

NURSING SPOTTED FEVER.

"INTERESTED" writes: I was very interested in reading the description of spotted fever in Belfast in the last issue of the *Nursing Mirror*, as I nursed a case on the district this last summer diagnosed meningitis, but about which the doctor was doubtful, as the symptoms were like those described in "spotted fever." I was called in on September 22, as the boy (who was four years old) had fallen off the form at school and vomited—the vomit being described as red, which was put down to his eating red berries, but this was not proved. Hæmorrhagic spots appeared all over the body in patches on the second day, and came out in fresh crops three times within a week. The skin in parts gradually peeled off, and in two or three places formed an ulcer. The child grew thinner every day and screamed at every movement. The vomiting continued for over two weeks, and was an almost black fluid. Nourishment was taken well for a day or two at a time, and then for one or two days refused, when the temperature dropped, but fluctuated for several weeks. I paid 102 visits in all, and the boy was convalescent at the end of November. He was put on a water bed, washed, hips and back rubbed and anointed twice daily, and latterly rubbed gently all over with olive oil. On November 3rd he was put into a fresh room with entirely fresh clothing, bed, etc., and from that time began to recover. For a fortnight he appeared to be paralysed, but he very gradually gained the use of his limbs and muscles. He had "Kepler" solution of malt and cod liver oil for several weeks during convalescence, and, though now not looking over-robust, he is run-

ning about. No one else took the disease, though a great many friends and neighbours went to look at him and assisted with night duty, and no disinfecting was done, except by air—the window being open night and day.

THE DISTRICT NURSE AND THE PARISH DOCTOR.

"E. W." writes: I should feel grateful if you will print this for me in *THE NURSING MIRROR*, as I should like the opinion of others whether I did right under the following conditions: I am working in Cheshire as a district nurse. The district nurse depends upon her cases being sent in by the doctors, so that if she offends they give her no work. That has happened several times to other nurses before I came. The parish doctor here is rather difficult to work under, but as he is the nurses' doctor as well I have managed for a year and a half not to offend him. Lately I was taken ill with influenza. He met me at a patient's house. I was then very unwell, and he just said, "Work it off, like I have to do." Next day I had to stay in bed, and was so ill that I sent for him. He never came, and several ladies on the committee wanted me to send for another doctor, but I told them that I would wait until next day. He did not come then, so I sent for another doctor, who came, and was most kind. The parish doctor turned up twenty-four hours after, so I told him I had another doctor. He said that I ought to have sent again for him, and one lady on the committee thinks the same, and that I did very wrong. Now I am told that the parish doctor will not give me any cases. It seems very hard to be so restricted.

THE CONSUMPTIVE AT HOME.

"MIDGET" writes: The article appearing in your number of February 2 interests me greatly, having had a large experience of work in sanatoria, and the difficulties in providing the after-treatment which is often so necessary, for the well-being of the patient and the safety of his friends. For people with plenty of money it is generally easy to persuade them that the treatment must be continued, and the life led a healthy one, but for the patient with his living to earn this further treatment becomes a far greater problem than most people imagine. In some sanatoria every effort is made to provide them with healthy outdoor exercise in the case of men, or in the case of women with an indoor life under the most favourable circumstances. Where they live in towns they are advised to remove to the country if possible, but here want of means often comes in the way. Many of the patients have spent their savings to secure the open-air treatment, without which they would probably have died, and frequently they have to return to work long before they are fit, as no more money is forthcoming. Some have fairly comfortable homes where friends willingly assist them to carry on the treatment, and one is often cheered by the favourable reports sent in from time to time. But many have no homes to which they can return; they have to go to lodgings and manage as best they can. It is surprising sometimes how much is done by the persevering ones; many of them change their work, though with great difficulty. For instance, it is by no means easy for a clerk to find outdoor occupation, which he is able to do, or for a woman to obtain the suitable indoor employment. Some are unable to change their work, and must return to their former life, and it is sad to feel that they must almost inevitably fall ill again. Others, of course, have their homes with gardens, where a father or brother or friend gladly builds a shelter in which the patient spends his time quite cheerfully, making steady progress, defying the weather under any circumstances, and becoming a wonder to all his friends, and to whom he gives faith in the fresh air and the good, wholesome food which he knows is life to him. It is a matter of regret that so few nurses have any practical experience of sanatoria and their methods. People are always influenced by those who speak of a subject of which they are master. Frequently a nurse comes in contact with people in the first stage. She sees at once medical advice is necessary, so that the doctor may not have to say later, "If only I had seen this patient before how much might have been done." But sometimes it is very difficult to persuade

people who only feel a little ill to consult a medical man. Then the nurse might impress a few simple things on the invalid, the need for fresh air, the care of sputum, and the danger to other members of their family. In this way much can be done to prevent the disease spreading. I have heard nurses say that sanatorium work seems wasted time. Why? because they want to do something great. I quite agree that it is often much more difficult than hospital work where the cases are so varied, and at times one gets very discouraged, as the patients are a long time before they make much progress, but anyone taking up the work with the spirit of doing what little they can to fight against consumption will be amply repaid.

Appointments.

BELFER WORKHOUSE INFIRMARY.—Miss Kate D. M. Underwood has been appointed superintendent nurse. She was trained at Birmingham Infirmary, where she has since been night sister.

DEVONPORT WORKHOUSE INFIRMARY.—Miss Lillie Edworthy has been appointed charge nurse. She was trained at Nottingham Workhouse Infirmary, and has been children's attendant at King's Norton Union, Birmingham.

ROYAL HOSPITAL FOR SICK CHILDREN, EDINBURGH.—Miss Isabel Bothwell and Miss Mabel Cooper have been appointed staff nurses. Miss Bothwell was trained at Pendlebury Children's Hospital, and has since been charge nurse at the Manchester Children's Hospital Convalescent Home. Miss Cooper was trained at Bradford Children's Hospital.

ROYAL UNITED HOSPITAL, BATH.—Miss Ida Nash has been appointed sister of the women's medical wards. She was trained at the Royal United Hospital, Bath, where she was afterwards on the private staff and night sister. She has since been sister at the Hertford British Hospital, Levallois Perrett, Paris.

STOCKPORT INFIRMARY.—Miss G. Fitzgerald has been appointed sister. She was trained at Manchester Royal Infirmary, where she has since been staff nurse. She has also been night sister at Grantham General Hospital.

STROUD HOSPITAL.—Miss Annie Charteris has been appointed charge nurse. She was trained at the Royal Infirmary, Dumfries, and has since been ward sister and night sister at Burnley Hospital, ward sister and theatre sister at the East Sussex Hospital, and night sister at Chalmers' Hospital, Edinburgh.

THE POLYCLINIC HOSPITAL, PHILADELPHIA, U.S.A.—Miss Elsie Macdonald has been appointed matron of the Nurses' Home. She was trained at the Royal Infirmary, Manchester, and at East Pilton Fever Hospital, Leith, N.B. She has since been staff nurse at the Royal Infirmary, Manchester.

WATFORD ISOLATION HOSPITAL.—Miss Gertrude Praegh has been appointed charge nurse. She was trained at University College Hospital, London, and has since been charge nurse at the Eastern, Northern, and Western Hospitals under the Metropolitan Asylums Board, and charge nurse of the diphtheria wards in an Isolation Hospital. She has also done private nursing at Leicester.

Queen Victoria's Jubilee Institute for Nurses.

MISS ANNE HISCOCKS has been transferred to Ashby-de-la-Zouch from Kilburn, and Miss S. Sullivan to Bolsover from Birmingham. Miss Barbara Lendrum has been appointed to Plaistow Maternity Charity and District Nurses' Home, and Miss L. E. Fenton to Huddersfield. Miss Marguerite Dancy has been appointed temporarily to Hackney, and Miss Selina Sellers also temporarily to Bath.

The London Association of Nurses.

ON Shrove Tuesday, February 12, an "at home" was held at 3 Burwood Place, under the auspices of the London Association of Nurses, when Mr. Louis Dick, secretary of the Royal National Pension Fund for Nurses, gave an address, explaining the advantages of the Fund, and urging membership on those who had not yet joined. Considering the busy time, a goodly number of nurses managed to be present, and the gathering was much enjoyed, though all were saddened by the news that within the last few days two promising young nurses on the staff of the Association—Miss Ross Rowley and Miss S. J. Glossop—had passed away.

The Sanitary Inspectors Examination Board.

THE following is a list of the candidates who passed in the examination for sanitary inspectors under the Public Health (Lond.) Act, 1891, held in January 1907: Miss C. Beeny, Miss E. Brown, Miss F. E. Evans, Miss M. D. Herskind, Miss E. G. M. Johnson, Miss C. E. Moir, Miss Moor, Miss E. B. Taylor, Miss J. C. Wienholt, Miss M. G. Williams received instruction from the National Health Society; Miss Elliott, Miss J. A. Jacobs, Miss J. J. Rawlings, Mr. J. D. Saul, Miss G. Stevens, received instructions from the Royal Sanitary Institute; and Miss H. Bhoose received instruction in Office as Inspector.

Central Midwives Board.

EXAMINATION PAPER.

At the examination of the C.M.B. on Tuesday the following questions were put to the candidates:—

1. Describe the normal appearance of the placenta and membranes immediately after delivery at term. What is a succenturiate placenta, and what is its importance?
2. You are called to attend a multipara at full term who has been for two hours in labour. She tells you that the waters have just broken. Describe in detail the examination you would think it necessary to make.
3. What is the nature of after-pains? Under what circumstances do they occur, and how would you recognise and treat them?
4. Describe in detail the management of twin labour after the birth of the first child, and give reasons for all you do.
5. What abnormal appearances of the skin may be met with in the first ten days of infant life? How do you distinguish them from one another?
6. What are the duties of the midwife, according to the Rules of the Central Midwives Board, towards the patient in regard to the following points?—(a) In the matter of staying with the patient after labour has begun; (b) passing the catheter; (c) if the life of the new-born child appears to be in danger.

Queen Alexandra's Imperial Military Nursing Service.

MISS E. McGRATH, Miss C. M. MacRae, Miss M. H. Smyth, and Miss M. C. Watson have been appointed staff nurses in Queen Alexandra's Imperial Military Nursing Service. Miss A. C. Mowat, staff nurse, has been transferred to the Military Hospital, Gosport, from the Queen Alexandra Military Hospital, Millbank; and Miss H. Winzer, to the Queen Alexandra Military Hospital, Millbank, from the Military Hospital, Gosport.

Death in our Ranks.

ON Saturday last there passed away Nurse Maude Kathleen Hutchinson, aged 27, late of Lambeth Infirmary, after 19 weeks' illness, caused by "ulcerative endocarditis" and "septic peritonitis," contracted whilst nursing. Her sufferings were borne with patience and fortitude. She was laid to rest on Monday in the parish churchyard of St. Mary Wolborough, Newton Abbot, Devon.

Where to Go.

"GARDENS OF DELIGHT."—Under this title Mrs. Cardwell Crofton is exhibiting a number of her water-colour pictures of gardens at the Modern Gallery, 61 New Bond Street, W., until February 26. This is the second exhibition Mrs. Crofton has given, and the 68 pictures form a delightful gallery of beautiful gardens of every type, which cannot fail to give pleasure to all lovers of nature and the country. Mrs. Crofton possesses the power of giving the atmosphere of gardens, and her paintings of flowers and trees is quite remarkable for its excellence.

Novelties for Nurses.

A TESTIMONIAL BOOK.

MANY nurses must have experienced the discomfort of carrying about with them frequently "somewhere at the bottom of their box," where they become crushed and dirty, such testimonials as they have received and which they really highly value. A neat little book has just been produced by the Nurses' Co-operative Association, Stockport, which should make a welcome and useful private gift from one nurse friend to another. It has crimson-padded covers and gilt edges for 2s. 6d., or it may be obtained in plainer style for a shilling. The doctor, matron, or patient who is anxious to record pleasant things of the owner can be asked to write in the book direct instead of on a loose sheet of paper, and it is safe to prophecy that this dainty "Testimonial Book" will soon be ranked amongst the most necessary possessions of many nurses. There is some valuable information for reference on the first few pages, including an obstetric table, medical baths in common use, and general rules of quarantine.

A COMPETITION FOR CHRISTMAS, 1907.

THE success of our experiment last year in inviting nurses to write our Christmas Supplement induces us to afford them the opportunity next year of contributing to our columns a special short story bearing upon hospital, infirmary, mental asylum, or district or private nursing life, not necessarily consisting of actual facts, but, if possible, founded upon them. The length of the story, which must, of course, be interesting and probable from first to last, should be about 5,000 words, and, other things being equal, preference will be given to the contribution which is accompanied by two or three good photographs or drawings, for purposes of illustration. The sum offered for the story is £5 5s., and the competition is open to nurses in all parts of the world. In order to stimulate effort, we shall send a cheque for £2 2s. to the author of the story which we consider second best, reserving the right to publish it. With the view of enaoming our readers in the Far East and other distant quarters of the globe ample time to forward MS., contributions will be received up to June 30, 1907; but we shall be glad to have them as soon as convenient. They should be addressed to the Editor, Nursing Section of THE HOSPITAL, and marked outside "Christmas Competition."

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Notes and Queries.

REGULATIONS.

The Editor is always willing to answer in this column, without any fee, all reasonable questions, as soon as possible. But the following rules must be carefully observed.

1. Every communication must be accompanied by the name and address of the writer.
2. The question must always bear upon nursing, directly or indirectly.

If an answer is required by letter a fee of half-a-crown must be enclosed with the note containing the inquiry.

Training in Birmingham.

(201) Is there a hospital in or near Birmingham where I could become a probationer and receive a small salary?—*Redditch.*

At the Infirmary, Birmingham, you can be received between 21 and 35 years of age at a salary of £10 the first year. But you must pay a premium of £20. At the Birmingham and Midland Hospital for Women, salary, first year, £2. We advise you to get and study "How to Become a Nurse," 2s. 4d. post free, from The Scientific Press, 28 and 29 Southampton Street, Strand, London, W.C.

Children's Nurse.

(202) I wish to become a children's nurse. Where can I train?—*Cranleigh.*

The Norland Institute, 10 Pembroke Square, W.; the Liverpool Ladies Sanitary Institute, 27 Lacey Street, Liverpool; School of Domestic Science, Belmont House, Cheltenham, etc.

(203) Where can I train as a children's nurse?—*Glasgow.*
See answer to *Cranleigh.*

Home for Old Gentleman.

(204) I am anxious to find a home for an old gentleman. He could pay about 16s. weekly. Can you help me?—*Anxious.*
Apply to Sutton's Hospital, Charterhouse, E.C. There may possibly be a vacancy.

Nursing Abroad.

(205) Where can I apply for a post as nurse abroad?—*Brighton.*

There is a list of nursing homes abroad in "How to Become a Nurse," price 2s. 4d. post free, The Scientific Press, 28 and 29 Southampton Street, Strand, London, W.C., but we fear that you are too late for this season.

Home for Old Woman.

(206) Is there any home which would receive a helpless old woman?—*Southwark.*

Try Nazareth House, Hammersmith.

Training in Sheffield.

(207) I should like to become a probationer, with salary, in Sheffield. I am nearly 21.—*Sheffield.*

Apply at once to the Sheffield Workhouse, the Clerk to the Guardians, Union Offices, Westbar, and say you wish to put your name down at such a date as you will be 21. The salary is £10 the first year. Then try and educate yourself in the meanwhile. Improve your writing, and ask advice of some educated friend as to what you should do.

Training in Nottingham.

(208) Is there an institution in or near Nottingham where probationers receive a salary the first year?—*Nottingham.*

At the Nottingham General Hospital probationers receive a salary of £6 the first year, but they have to pay a premium of £10 10s. on entrance. The Children's Hospital, Nottingham, £5 first year; Nottingham Hospital for Women, £6; and Samaritan Hospital, £10; but only two years' training is given.

Home for a Girl.

(209) Can you tell me of a home for a girl of 22 who is not insane, but occasionally unmanageable? A small sum can be paid.—*A. H. L.*

Possibly the Cavendish Industrial Home, Pond Street, Hampstead, may suit. The charge is 5s. weekly.

Handbooks for Nurses.

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| "How to Become a Nurse: How and Where to Train." | 2s. 4d. | Post Free. |
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| "Complete Handbook of Midwifery." (Watson.) | 6s. 4d. | |
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For Reading to the Sick.

THINGS OF BEAUTY.

A THING of beauty is a joy for ever :
Its loveliness increases ; it will never
Pass into nothingness ; but still will keep
A bower quiet for us, and a sleep
Full of sweet dreams, and health, and quiet breathing,

Such the sun, the moon,
Trees old and young, sprouting a shady boon
For simple sheep ; and such are daffodils
With the green world they live in ; and clear rills
That for themselves a cooling covert make
'Gainst the hot season :

Glories infinite,
Haunt us till they become a cheering light
Unto our souls, and bound to us so fast,
That, whether there be shine, or gloom o'ercast,
They always must be with us, or we die.

Keats.

The world of Nature tells us of the God with Whom we have to do. The book is always open, in which we can read of God's wisdom, power, and goodness. We learn of Him by the marvels of the earth and sea and sky. As we search more deeply, with more trained skill, into the things around us, we find ourselves face to face with ever new mysteries, which humble us as we vainly try to read them. God lets us see His work; but He does not let us watch Him at work, or know how and why things are as we find them.

The Father of lights, "with whom is no variableness, neither shadow of turning," gave being to the heavenly bodies, and gave them power to shed blessing on our world. He guides their courses, and rules the movements of the earth, so that it may more fully receive their influence. We need the bright days, and the warmth that beams from the cheering sun. But these would not be the blessing that they are, did not clouds sometimes darken over us. Those very clouds, indeed, are among the blessings that we owe to the sun. The frosts and snows and storms have their good work which God has given them. We reap in harvest a blessing, which the dark chill winter and the glowing summer have each shared in bringing to us.

We can trace a steady course in the world of Nature. So we know how to act, and what to expect. Sometimes strange things happen, which man has not yet learned to put into their place with other things. But we are sure that nothing goes from under God's control, and that, if we knew more, we should see that there is no breaking in on the order which God has fixed. In the world of grace we can mark the working of the same God; and we must look to find ourselves at fault, when we try to search beyond where God gives light to see. But we learn to trust; and to own humbly, that we cannot judge the power or wisdom of the God of grace. There is order where to us all seems confusion. Storms bring a purer air, and a more lasting calm. What seems to threaten ruin is needful to save from ruin, and to work salvation. Christ is the Sun of righteousness; and from Him grace and truth come to us, even though our sky is overcast.—*Anon.*

The Hospital.

Nursing Section.

Contributions for "THE HOSPITAL," should be addressed to the EDITOR, "THE HOSPITAL"
NURSING SECTION, 28 & 29 Southampton Street, Strand, London, W.C.

No. 1,667.—VOL. XLI.

SATURDAY, FEBRUARY 23, 1907.

Notes on News from the Nursing World.

NURSES ON BATTLESHIPS.

THE employment of female nurses on battleships is a very different thing from their employment on hospital ships accompanying the fleet in action. If, unhappily, this country were engaged in a naval war, we are sure that the services of female nurses would be indispensable on hospital ships. But their presence on battleships, in the first fighting line, which has been proposed, would be much more embarrassing than useful. It is incredible that such a proposal would receive the sanction of the authorities; more especially as naval orderlies—the Sick Berth Staff as they are called—are now receiving a good training in nursing. They are trained at the naval hospitals at Portsmouth and Plymouth, much of the instruction being given in the wards by the naval nursing sisters.

NURSING AS A LIVELIHOOD.

THE matron of Charing Cross Hospital has been explaining to the representative of a lay paper the difference between the nurses of yesterday and to-day. Miss Heather-Bigg denies that when she became a nurse, twenty-two years ago, they were bad old times. She thinks that the nurses of those days were not more tired, in spite of longer hours and less recreation, than the nurses of to-day; and she believes that at that period women usually took up nursing because they felt that the life was a vocation. Now, she is of opinion that the motive in most instances is to earn a living, but we gather that she is indisposed to blame anyone for looking upon it in that light. With all our admiration for the still numerous women who regard nursing as a vocation, we are unable to see why it should not also be regarded as a mode of gaining a livelihood. In the ideal nurse the two motives are nicely balanced and thus zeal is tempered by discretion.

AN APPEAL TO THE CENTRAL AUTHORITY.

THE Northallerton Guardians having refused to comply with the request of Dr. Hutchinson, their medical officer, to provide a night attendant for the workhouse, the latter, we think, took the right action in deputing the matter to the Local Government Board. Having made it clear to the Guardians that a night attendant is necessary for the cases which are at present in the infirmary, he was not only justified, he was bound in the interests of the sick poor, to appeal to the central authority. The Local Government Board have now asked the Guardians for an explanation, and they have referred the question to the Finance Committee to consider and report thereon. The worst of it is, that

while the Guardians are shilly-shallying about, some of the patients in the infirmary, without a night attendant, may suffer from their inaction, even to the extent of losing their lives.

AN OPENING FOR PRELIMINARY TRAINING.

IT will be observed, from the report of our Commissioner's interview with the matron of the Alexandra Hospital for Children with Hip Disease, that a new rule for the admission of probationers has just come into operation, and that the course of instruction, which was formerly for one year, now extends over two. The training is purely of a preliminary character, and is chiefly intended for young women who are not old enough to enter a general hospital but desire a useful occupation. The matron states that she does not think that the probationers leaving the institution experience difficulty in obtaining training elsewhere, and they should, at any rate, possess a good knowledge of the nursing of helpless children who need the maximum of care and attention.

INCREASE OF STAFF AT BIRKENHEAD INFIRMARY.

QUICKLY following the appointment of the new assistant superintendent nurse at Birkenhead Workhouse Hospital, the Guardians have unanimously decided to engage three additional nurses for night duty. The need for the increase was clearly shown. For example, the guardian who moved the resolution in favour of the addition stated that on one occasion only a single probationer had been on night duty in charge of eleven wards. We are glad that there was no opposition to the motion, and that the Birkenhead Guardians are doing their best to level up the nursing at the Workhouse Hospital, instead of falling back upon the plea that other institutions are content to be behind the times.

A STAFFORDSHIRE SCANDAL.

THE report in the lay Press that the Hanley, Stoke, Fenton, and Longton Joint Hospital Board have instructed their Clerk to prosecute a man, an ex-patient, who got over the wall of the Isolation Hospital two miles from Hanley, in order to see one of the nurses, is not correct. As a matter of fact, the Board are unable to prosecute because the patient who gave the information to the matron and charge nurse refuses to make a statement in court. Having obtained access to the building the man in question went in the night to the ward where this nurse was on duty, paying his visits between 12 and 2 A.M., and has, we understand, written a letter to the matron confessing his visits. The nurse

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to whom he refers denies having seen him, but we think, under the circumstances, the Board did well to approve the action of the medical officer in discharging her.

GRATITUDE FOR SMALL MERCIES.

In the annual report of the Trained Nurses' Annuity Fund for Disabled Nurses, just issued, it is mentioned, with gratitude, that the general subscriptions last year show an increase, and that there are now fifteen annuitants. In other words, the fund, after being established for thirty-two years, is able to grant annuities to the amount of £255. Of course, £17 a year is very much better than nothing, but that there should be but fifteen worn-out trained nurses in receipt of this pittance is a discouraging outcome of the efforts made by the Council. The extracts from the letters received by the hon. secretary in 1906 are pitiful in the extreme; the more so from the fact that the Council could not vote more than a single additional annuity. We are glad to learn that Miss Sidney Browne has recently joined the Council and hope much from her well-known energy.

TRAINING AT BELFAST INFIRMARY.

A PROPOSAL by the Belfast City Corporation that the Belfast Guardians should supply them with probationers for training in the Infectious Diseases Hospital at Purdysburn, has lately been agreed to. But a further suggestion of the Infirmary Committee, that two vacancies in the nursing staff of the Infirmary should be filled by temporary appointments, was set aside, and an amendment in favour of an inquiry into the nursing system was adopted instead. We think if, as one of the Guardians said, there are at present more than the number of nurses originally contemplated, this is a wise precaution. It is possible that in spite of this increase the number may be proved inadequate to meet the standard of a great Poor-law institution.

DISTRICT NURSES AND BICYCLES.

THE value of a bicycle to a district nurse has long been recognised. In fact it has become practically indispensable. It has also the great advantage of being very inexpensive. The Committee of the Leamington District Nursing Association, in appealing for funds to enable them to provide a new or second-hand bicycle for the use of their three nurses, mention that the one which was given them nine years ago is completely worn out. As a serviceable bicycle can be purchased for £10, this represents an expenditure of only a little more than £1 a year. But we think that the time has come when a bicycle should be recognised as part of the necessary equipment of a nurse engaged in district work, and paid for by the Association as a matter of course.

A SHAMEFUL SLANDER.

At the Sussex Assizes on Saturday, an action for slander was tried, the plaintiff being Miss Woodward, a nurse. She had attended two patients at Brighton—Mr. and Mrs. Nash—and after the death of the latter she continued to nurse the former. The alleged slander was to the effect that the nurse had been guilty of immoral relations with

her employer, that she had obtained possession of his wife's jewellery, and that she had been instrumental in causing the death of Mrs. Nash. These odious charges were all proved in court to be absolutely unfounded. Mr. Justice Bucknill having sharply interrogated Miss Nelson, the defendant, who was threatened with imprisonment for contempt of court before she would answer, she had to make the most serious admissions, and the jury then awarded the plaintiff £100 damages. We are glad that Miss Woodward had the courage to take the case into court, and congratulate her upon the vindication of her professional and personal character.

GUARDIANS AND NURSING ASSOCIATIONS.

WE record with satisfaction the fact that the Long Ashton Guardians have resolved, at the instance of Sir Henry Miles, to contribute five guineas a year to the support of the district nurse for the parish of Pill, and that the Bideford Guardians have decided upon increasing their yearly subscription to the Nursing Associations in their Union which extend their work to pauper patients. A most striking testimony of the soundness of this policy was given by one of the Bideford Guardians when the matter was discussed. He stated that, while the Board paid £23 last year for the nursing of the poor in Hartland, where the district nurse does not tend the sick in receipt of parochial relief, at Northam where such persons are included among the nurse's patients, the cost of nursing to the Board for the year was covered by the guinea subscribed to the Nursing Association. The Taunton Guardians, who have been asked to increase their subscription to the Kingston Association by a guinea, have postponed their decision, but in the light of the experience of the Bideford Board, we should think that the request will be acceded to. Meanwhile, the Chorley Guardians, unable to come to a definite conclusion, have resolved to make an annual grant of £15 to the District Nursing Association, subject to the approval of the Local Government Board.

A GOOD EXAMPLE AT STAFFORD.

AN excellent feature of the report of the Stafford District Nurses' Society is that the income is derived, not from large subscriptions from a few individuals, but from small sums from many. Last year the income was £254, as against an expenditure of £200, and although the balance in hand at the beginning of the twelve months was £48, the figures indicate that there has been a slight increase in contributions. The nurses attended more than 200 cases, and paid more than 5,000 visits. We congratulate the Committee upon the pains which are so successfully taken to obtain the regular support of the class which almost exclusively derives benefit from the work of the nurses.

GUY'S HOSPITAL PAST AND PRESENT NURSES' LEAGUE.

A COURSE of post-graduate lectures on the newest methods and treatment of medical and surgical cases will be given by Dr. French, physician, and Mr. R. P. Rowlands, surgeon, Guy's Hospital, on Wednesday evenings, commencing February 27,

and ending on April 3, in the Nurses' Home at 8.15 P.M. The fee for the course for members will be 6s., and for non-members, 7s. 6d. The lectures will be printed in pamphlet form and will be sent out to subscribers in due course. Intending subscribers should send in their names to the matron as early as possible.

RESIGNATION OF A LONDON HOSPITAL MATRON.

THE post of matron of the London Homœopathic Hospital has become vacant by the resignation of Miss Victoria Daunt, who succeeded Miss M. Brew in November 1905. Miss Daunt was trained at the Great Northern Central Hospital, where she was afterwards sister for several years. She subsequently went to the National Hospital for the Paralysed and Epileptic as night sister, and was for a short time acting matron. The salary attached to the vacant appointment is £100 a year; and candidates must be over 30 and under 45 years of age. Applications should be sent to the Secretary of the hospital, Great Ormond Street, Bloomsbury, W.C., by March 1.

EAST LONDON HOSPITAL FOR CHILDREN.

At the half-yearly Court of the East London Hospital for Children on Monday last the Board expressed their pleasure that the Lady superintendent, Miss Rowe, who had been absent for three months, was able to return to her duties, and tendered her their most sincere sympathy for the cause of her absence.

IN THE ABSENCE OF THE NURSE.

AN extraordinary incident has taken place at Reigate and Redhill Borough Isolation Hospital. A boy of fourteen, a patient in the diphtheria ward, during the absence of the nurse, jumped through a window, and, scaling a high gate, got away. It appears that he then walked through the mud for two miles, obtained access to his father's house without rousing the family, and was found the next morning by a Redhill police officer partaking of tea and toast in the kitchen. When it was discovered that the boy was missing, the matron and nurses at once made a search for him, and were unable to find him. He has since been taken back to the institution. It is difficult to say without knowing the manner in which the hospital is worked where the fault lay, but we are quite certain that it ought not to be possible for a patient to leave it unperceived in the middle of the night.

A MANCHESTER NURSE AND THE JAMAICA EARTHQUAKE.

WE hear of another nurse who distinguished herself in her efforts to succour the injured at the time of the earthquake in Jamaica. One of the latter was Sergeant Sharpe, of the Royal Army Medical Corps, and his wife, the daughter of Staff-Sergeant Bright, of the Manchester Medical Volunteers, rendered the most valuable assistance. After she had assisted to patch up her husband, who was badly hurt, she helped in the camp as long as help was required, and then continued her work day and night among the married people. She herself, with her little baby, had a narrow escape. Before her marriage, three years ago, Mrs. Sharpe was a sister at West Didsbury Hospital, where she was trained.

A LECTURE AT GUY'S NURSES' HOME.

IN connection with Guy's Hospital Photographic Society, which is a branch of the Nurses' Recreation Society, an interesting meeting was held in the Nurses' Home on Thursday evening last week. Miss M. Smith, Secretary of the Society, gave a lantern lecture entitled "A Ramble through London with Charles Dickens." The slides were excellent, and some of them had been taken and prepared expressly for this lecture by Miss Smith. As many of the well-known haunts appeared in view the lecturer conducted her party in imagination from the familiar Borough and over London Bridge to St. Paul's, then on to Holborn and Staple's Inn, and finally back to "Guy's entrance gates." The references to Mrs. Gamp provoked ludicrous comparisons between the fitness of the past and present nurse for her profession. Buckingham Street, too, with its present suggestion of massage, came in for some amount of interest in association with "Miss Betsy Trotwood," who once had apartments in a house still standing there. The proceeds from the tickets go to supply needed funds for the prizes for the annual exhibition of photography at Guy's.

A NURSE AS SUFFRAGETTE.

MISS OLIVIA SMITH, one of the fifty-two "Suffragettes" arrested last week for making a disturbance outside the Houses of Parliament, describes herself as a nurse of Clement's Inn, and wore a nurse's costume in court. The evidence against her was that she "deliberately got hold of the bridle of a mounted officer's horse and shoved it about." Her explanation was that she "had already shoved one horse off the footpath, and the policeman said, 'There's another there; go and shove that.' Not liking to break the law, she went and did as she was told." The magistrate ordered her to pay forty shillings or go to prison for a month; and as she elected to go to gaol, she was sent to Holloway.

CONFERENCE AT ALNWICK CASTLE.

THE Duchess of Northumberland entertained at Alnwick Castle a few days ago a large number of delegates representing the various districts working in connection with the Northumberland County Nursing Association. This Association numbers 72 nurses and two relief nurses. Mention was made in the tenth annual report, which was discussed at a conference in the Great Hall of the Castle, of the death, during the year, of Lady Grey, who took the keenest interest in all kinds of nursing.

SHORT ITEMS.

THE late Lord Grimthorpe has left £1,000 to "the Victoria Nurses' Fund" and £100 to "the Hon. and Rev. R. Grimston's Nursing Fund."—Miss E. H. Beecher, R.R.C., Principal Matron in Queen Alexandra's Imperial Military Nursing Service, has been appointed secretary to the Nursing Board in succession to Lieut.-Col. B. M. Skinner.—On Wednesday evening last week Miss Studley, Principal of Long's Swedish Gymnasium and Institute for Medical Gymnastics and Massage, gave a lecture to the members of the Irish Nurses' Association, and with the help of some of her assistants practically demonstrated some of the movements used in the treatment of various cases.

The Nursing Outlook.

"From magnanimity, all fears above;
From nobler recompense, above applause,
Which owes to man's short outlook all its charm."

MAKE-BELIEVE IN BRITISH NURSING.

II. A COMEDY TO BE ENDED OR MENDED.

WE showed last week from the report of the Matrons' Council that, for practical purposes, the National Council of Nurses, the Society for the State Registration of Trained Nurses, the British section of, and indeed the International Council of Nurses also, as will appear directly, depend for their bone and sinew on some eight or ten ladies, several of whom are not now actively engaged in nursing, but who call themselves the Matrons' Council of Great Britain and Ireland. How seriously some of these ladies take themselves is well illustrated by their official announcement, that two of them, "intend to visit Paris *after the opening of Parliament*." Another humorous touch is the method pursued to make much out of little, by the use of high sounding titles to cover the weakness of the position, due to the smallness of the Stage Army, and to the absence of the names of the leaders of nursing in this country. Thus, the Stage Army managers, in order to remove "some misapprehension concerning the organisation of the Conference in Paris," "make it plain that all such organisation is in the hands of the officers of the International Council of Nurses—Mrs. Bedford Fenwick, founder and honorary president; Miss McGahey, president; Miss L. L. Dock, honorary secretary; and Miss M. Breay, treasurer; together with the Councillors, the British and American Matrons who are Foundation Members."

Here it will be noticed that the third International Conference, after all these years, is still to derive its bone and sinew from the Matron's Council, the constitution of which was set forth in our article last week. Both Miss McGahey, the late lady superintendent of the Royal Prince Alfred Hospital, Sydney, who was trained at the London Hospital, where she was at one time a matron's assistant, and Miss L. L. Dock from the United States, whose ability no one will question, are honorary members of the Matrons' Council. We cannot ourselves believe, that, either Miss McGahey or Miss L. L. Dock, in fact, fully realise that, in associating themselves with the Stage Army, they are placing themselves in opposition to the sentiments and opinion of the accredited leaders of British nursing, and to the views and wishes of the great body of trained nurses in Great Britain. However, if they are fully conscious of these facts, and are acting with deliberation, it is well that they should be reminded that, the non-representative character of the Matrons' Coun-

cil, and all that appertains to it, must react upon the International Nurses' Council. If the latter Council is to fulfil any useful purpose, it must be made a representative body, and must include the accredited leaders of nursing in every country, which is claimed to be represented at each Conference it may hold.

It would, then, be a calamity should foreign countries not fully realise that, at present, British nursing is not represented by its responsible leaders, or in any real sense at all, on this so-called International Council of Nurses. These leaders have, hitherto, been excluded from it by circumstances, which are perfectly well known throughout the nursing world. There is, therefore, in reality, no representative International Council of Nurses. For this reason, mainly, the so-called International Congress has been regarded in this country as a comedy. This view is based on the facts we have published in this and a former article. No one questions the ability of some, at any rate, of the ambitious women who are responsible for the comedy in question. It is to be regretted that they should not have used their brains to better purpose, and, by sinking all personal ambition, have brought themselves into line with the best nursing opinion, by putting an end to the Stage Army and its proceedings.

We have felt it to be our duty, as the most representative and oldest nursing paper, to call a halt at this stage of the masquerade, and to ask every member of the profession to look the whole matter squarely in the face. It is certainly due to British nursing, that the true inwardness of the proceedings of the organisers, of the proposed International Congress in Paris, should be promptly and clearly brought to the knowledge of the Director of the Assistance Publique. It would be a calamity, and most unfair to this most courteous and able hospital authority, not to put him and all other French authorities in possession of the actual facts.

England has been the foster mother of modern nursing. It is most important that all nursing authorities in foreign countries should clearly understand, that, British nursing is, in no real sense, represented by the small body of matrons and ex-matrons, whose ambition it is, to control nursing affairs in this country, and to largely dominate nursing affairs all the world over, through the so-called International Council of Nurses. If an International Council of Trained Nurses is ever to prove of practical value, or to escape from the perilous risk of becoming the laughing stock of most that is best and intelligent in modern nursing, it is essential that it shall be made representative of every great school of nursing, and also of trained nurses throughout the world. At the present time, the attitude assumed by a few ambitious women, who have pushed themselves forward as reformers, is merely blocking the way of all joint action, of all national courtesy, of all unity of aim. And yet they boast that theirs is a campaign of nursing reform!

Nursing in Tropical Climates.

By ANDREW DUNCAN, M.D., B.S., M.R.C.P., F.R.C.S., Fellow King's College, Lecturer on Tropical Medicine at the London School of Tropical Medicine, and the Westminster Hospital.

VII. DYSENTERY.

THE nurse will not be long in the tropics before she has a case of dysentery under her charge. Formerly this was held to be one disease; it is now known that under this term are included several varieties "of intestinal flux, the acute forms characterised by pain, frequent passage of blood and mucus, the more chronic by diarrhoea alternating with constipation and a tendency to recurrence. Usually there is inflammation, and in the chronic cases ulceration of the large bowel" (Osler).

CAUSATION.

Briefly, there are three varieties of the complaint—one caused by a bacterium, one by an amoeba, and one the dysentery found in war in which no organism is found, as in our recent war in South Africa. As regards the predisposing causes, we may mention—

1. SEASON.

In the tropics dysentery is less frequent in the cold season, becoming more common in the months of heat and drought, and commonest of all towards the end of the rains and beginning of the dry season—that is to say, in those months corresponding in temperate climates to the end of summer and autumn. The worst time for dysentery is at that period of the year characterised by extreme fluctuation of the temperature from hot days to cold nights. In Bengal it rages chiefly during the rainy season.

As regards the effect of *atmospheric moisture* or of *rain and dew*, opinions are somewhat divided, some authorities holding these factors to be highly important, others holding that they are not so. Hirsch inclines to the latter view. He instances 126 epidemics, 65 of which arose with the wet weather, 61 making their appearance in the midst of continuous dry weather and lasting through it.

2. INFLUENCE OF SOIL.

Where a soil is organically polluted, and dusty so that infection is conveyed by the wind, dysentery is very likely to be prevalent.

3. MALARIA.

There would seem to be an indirect connection with malaria—namely, dysentery is very likely to prevail in the vicinity of swamps and marshes in proportion to the intensity and frequency of malarial fever. The mosquito, however, has not yet been held to convey the disease.

4. CONDITIONS OF THE FOOD.

(a) *Impure drinking water.* This has ever been a cause in our campaigns—for example, in the Egyptian War of 1882 much of the dysentery was due to the foul canal water drunk by our men. In our late South African War the Commission on Dysentery and Enteric Fever reported that the most frequent cause of the prevalence of dysentery was probably the drinking of the surface waters, especially those from the rivers which contained a very

large amount of mineral and organic matter in suspension. A large amount of disability thus occurred in Lord Roberts' march to Bloemfontein. A third example may be cited from the medical history of two French regiments of the line. During August of a certain year the 19th and 44th Regiments were barracked at Neuilly. The water was drawn for both regiments from the same source. The 19th regiment drank their water with brandy, the spirit of which precipitated the organic matter contained in it, and this putrefied in the contained vessel. The regiment was attacked with severe dysentery. The 44th Regiment used their water in making tea and coffee, the tannin of which prevented putrefaction. They only suffered from slight diarrhoea. Red wine was substituted for the brandy in the 19th, when the dysentery ceased. Where the disease results from impure water amongst large bodies of men, many patients will come into hospital.

(b) *Intoxicating liquors.* Intemperance greatly predisposes to the disease. In war after the capture of a city, unless strict precautions are taken by placing sentries over the wine-shops, much dysentery will ensue.

(c) *A monotonous diet* will favour the occurrence.

(d) *Salt rations.* In the first Burmese War (1824-26) for six and a half months the troops were fed on salt rations, and 48 per cent. perished principally from dysentery. Here the cattle were, in the first place, marched to Calcutta from distant stations and slaughtered in February 1824 under a degree of heat so great that decomposition must have set in. The flesh was then salted. Again, in the China War of 1840, notwithstanding this terrible precedent, we find the Government had learnt nothing. Cattle were again marched to Calcutta, and slaughtered in the heat of February, with the same consequences to the British troops. The meat was half putrid when the force sailed. In one regiment (the 26th Cameronians), embarking 900 strong and full of health, the result was that at the end of two months there were not 200 men left fit for duty in the field, owing to the havoc made by scorbutic dysentery. But even where the salt ration is not decomposed before salting, we have two evil factors: first, the irritant effects of a salt diet; secondly, the insufficient nutritive power, whilst the salt ration of military life is more highly salted than usual in order that it may keep for two or three years in any climate.

(d) *Excessive diet of fresh meat.* Often after raids in Algeria the French soldiers have been seized with this complaint from eating largely of the fresh mutton from the captured sheep.

(e) *Tinned provisions.* These, if largely used, as instanced in the Nile Expedition of 1884-86 and in the South African War, will bring on the affection.

(f) *Imperfect preparation of grain food.* In Lord Roberts' great Cabul-Candahar march the

native followers often arrived in camp too tired to cook their food properly, and so ate uncooked atta and Indian corn. Dysentery followed.

(g) *Fruit.* Trousseau held that fruits even when not ripe could not cause the disease. Horton dissents from this. In my experience in Afghanistan fruits played but a small share in the causation of dysentery. An almost unlimited supply of grapes and melons was at hand in the Kurram and Logar Valleys, and I never traced any of the dysentery to this supply.

(h) *The influence of flies.* Of all living things the fly is probably the most obnoxious. And those only who have been in the tropics know what an obnoxious plague the fly is. In the South African War the myriads of flies in the circumscribed camps were one of the chief means of spreading dysentery and enteric fever. Infesting the latrines, they carry the infecting material not only on their heads, but also on their bodies, legs, and wings.

(i) *Long occupation of the same ground by any large body of men.* In war any camp site should, if the military exigencies of the situation permit of it, be changed at intervals, otherwise the soil will become polluted with the excreta of men and animals, and bowel affections will inevitably arise. Morache draws especial attention to the effects produced by not changing camp at regular periods. The presence of a large number of men persistently remaining on one spot must inevitably infect the soil, whatever precautions are taken; organic matters from excreta of men and animals are trampled into the earth; foul water from various sources, such as from the kitchen, etc., is also imbibed from the soil, and soon a veritable forcing-bed for zymotic diseases is formed. And how this process must be advanced under a tropical sun! The infection of the soil thus arising is of itself sufficient to start the various forms of bowel complaint, including epidemic dysentery. A good example of this occurred in the New Zealand War in 1864, where, after the occupation of Waikato, several Government officials were employed in surveying the district. They constantly changed their camping-ground and remained perfectly healthy. After a time for protection they were obliged to pitch their camp near the troops, and kept on the same spot. Bowel complaints soon broke out, the more so as their camp was near that of the Land Transport Corps, who had remained encamped on the same spot for some time, and whose camp itself was notoriously unhealthy. As soon as they were

able to do so, the survey party changed their site, and the bowel complaints were at once arrested.

5. NEGLECT OF PERSONAL PRECAUTIONS.

In the tropics, especially on service, a neglect of personal precautions is a fertile source of dysentery. Thus, one should never sleep in immediate contact with the ground. One should always wear the cummerbund at night. Especially is it necessary to sleep under cover where the dew is drenching and heavy. A good example of this was shown in the Egyptian War of 1882, where the Manchester Regiment, under good cover at Ismalia, escaped the drenching dews that the rest of the force not located there were exposed to, and scarcely suffered at all from the bowel complaints which were so rife in the latter.

6. NEWCOMERS IN THE TROPICS

are especially predisposed to bowel complaints, due doubtless to the relaxing effect of the heat on the system. In a previous lecture allusion has been made to the opinions of Laveran and Brydon on this point, so that no more need be said on the subject beyond this—that the nurse should, on her arrival in the tropics, take all the necessary precautions (to be detailed presently) against these affections.

Two examples will fitly conclude this section of the causation of dysentery. In the Ashanti Expedition of 1863-64 great aggravation of the dysentery returns became evident. Out of 210 cases in 1864, 163 occurred in the rainy months—April to July—and out of 32 deaths 26 also occurred at this period. The huts leaked at the Prahsu Camp, rains having set in before the latter was finished. There were vast forests, a river, and dense jungle composing the site of the camp, which gradually became a swamp. The days were very hot, the nights very cool, and the food of salt meat, biscuits, and bad water. And, again, in the Malay War of 1875-76 dysentery truly scourged our men. In the Buffs the admission rate was 70.11 per 1,000. But two companies of the latter were kept stationary at Malacca; they had no mortality and great immunity from the disease. Why? On account of the light duty, good quarters, no sun exposure, good food, and midday heat tempered by a mild sea breeze: the mortality was 8.34 per 1,000 in the rest of the regiment located elsewhere.

In the next lecture the signs and treatment of dysentery will be dealt with.

(To be continued.)

The Nurses' Clinic.

GASTRIC CASES.

MANY and varied are the kinds of gastric diseases nurses must meet with in their daily work. It is a proud hour for the probationer when she gives her first feed to a case of gastrostomy, under the superintendence of the head nurse, who impresses upon the novice the importance of carefully mixing and straining the liquid diet. All gastric cases call for great skill and patience from the nurse in charge. Take, for instance, a case of gastric ulcer. A patient may have suffered from this complaint for years in a chronic form, or may suddenly develop it in an acute form.

The pain is, perhaps, mistaken for dyspepsia, and the patient keeps about until an attack of hæmatemesis occurs, and a doctor and nurse are sent for. If the nurse arrives first, she must see that the patient is kept lying absolutely flat, and not on any account allowed to sit up or make any movement unaided, all talking and excitement to be forbidden. The foot of the bed should be raised, fresh air admitted, and the limbs protected from cold by hot-water bottles. On no account let the patient take anything by mouth (particularly stimulants) till the

THE NURSES' CLINIC.—*Continued.*

doctor has seen the case and given his orders; he may allow ice to suck in small quantities, it allays thirst, but is provocative of wind and not always allowed.

Most probably blood will be passed in the stools, giving them a black, tarry appearance; this must always be watched for and noted.

The treatment varies slightly, according to the physician, but many prefer to give the stomach entire rest by employing rectal feeding for some days at least. After that, food by mouth is begun in very small quantities, $\frac{3}{4}$ ss. peptonised milk half-hourly till larger feeds at longer intervals can safely be taken. Afterwards plain milk may be tried, then a little clear soup, then gradually return to light farinaceous, and if no pain is felt a little boiled fish may be added, and finally chicken. The slightest return of pain is an indication that food must not be pushed, and it is certainly very disheartening to find that time after time a patient has to return to peptonised milk, but one must walk before one can run.

Should a gastric ulcer perforate, the outlook is very serious. An operation will probably be performed to sew up the hole, and the after-nursing is like any other severe abdominal section, great care being taken to prevent collapse, and to be on the watch for peritonitis.

Gastralgia is a very trying complaint, which can only be successfully treated by prolonged rest and strict attention to diet and such medicines as may be ordered. The patient complains of a burning feeling in the stomach, and almost any food aggravates the discomfort, the appetite is naturally very poor, and the patient so dreads eating that his condition is rapidly enfeebled.

The great thing on the nurse's part is always to prepare the food in as tempting a manner as possible, and not to serve up more than can safely be taken at one meal. It is never too much trouble to try recipe after recipe if, at last, something is found which the patient can take with a minimum of discomfort. I knew a case where, after having tried everything, a diet of pounded yolks of hard-boiled eggs was discovered. For some time the patient lived upon nothing else, and from thence gradually made a return to light food, and finally recovered.

Gastritis, or inflammation of the stomach, is another

complaint which needs skill in nursing. The patient is sometimes almost doubled up with pain, and constantly sick after food. Warmth and rest in bed and the lightest, most digestible food in small quantities, must be given. Benger's food, peptonised beef-tea, essence of chicken can be taken, but in cases of this kind the diet will be ordered by the doctor.

Cancer of the stomach is often met with in hospitals and districts. Probably the patient is a working-man, who has suffered for years from "Indigestion" and taken no notice of it till increasing sickness and emaciation force him to seek advice. He is very hopeful that a course of medicines will put him all right, but unless the disease is so far advanced as to be inoperable, an operation is almost a necessity. The patient must be prepared as for any other major operation, and warmly clad in flannel jacket and woollen stockings; hypodermic stimulants are, of course, to hand, as sometimes the shock is very great. After the operation he is put back into a well-warmed bed with a hot blanket next him, a cradle over the abdomen, a pillow under the knees to prevent any straining on the operated area, and he must not be left till he is well round. Nothing at all to be given by mouth at first, but the mouth may be frequently rinsed to clear it of the sickly taste of anæsthetic and to relieve thirst. A pint of tepid water given very slowly per rectum will also allay thirst, and is often ordered. As in all abdominal operations, flatulence is very trying for some hours after, the long rectal tube carefully oiled or smeared with vaseline and gently passed upwards and backwards into the rectum will disperse the wind and relieve the pain. The other end of the tube should rest in a dish.

Gastro-enteritis is very common amongst young children, particularly in large towns. Improper feeding, chills and insanitary conditions are pre-disposing causes, and as prevention is better than cure, a nurse can do much by urging the importance of good, boiled milk, simple wholesome food, warm underwear and cleanliness. Mothers often think they have done their duty after administering a dose of castor-oil, that favourite panacea for all ills amongst the poor, but gastro-enteritis is the cause of a large amount of infant mortality, and can often be prevented by a little common sense and forethought.

Incidents in a Nurse's Life.

DISINFECTING WORKHOUSE PATIENTS.

I WAS in charge of the "contact house and out-bathing station" of a town on the south coast during an outbreak of small-pox. We (myself, a maid, and a porter) had been there about four months, and things had quietened down, so that we were expecting every day to be recalled to the hospital to which we all belonged.

I had just finished supper one night and was thinking of bed, when a loud knocking at the front door startled us all. "Another case," I said to myself, for I knew no one but the medical officer of health would knock so late. "A case of small-pox at the workhouse, nurse," said the doctor as soon as he got in. "Eighteen contacts, most of them old and infirm; it is too late to bring them here, you must come with me, and we will disinfect them at the workhouse."

"And the case?" I said.

"Oh, it is too late to send him to 'the ship' to-night; he must come here, he is not so very bad, and you can have him transferred to 'the ship' as soon as the tide is up in the morning."

When we arrived at the workhouse I found there were two male nurses—they were waiters on a yacht during the summer—who were to bathe the men; while a very stout monthly nurse (who had been fetched over from the female block and was very irate about it) and myself were to put the old men's heads in hyd. per. chlor. caps and superintend generally. But before the doctor would allow us to go into the ward I had to cover my uniform with a patient's night-shirt with my apron on the top, remove my cap, and substitute a small towel, which left no hair visible, while the nurse was arrayed in an elaborate nightdress belonging to the matron and her head covered in similar fashion. Attired in this way we entered the ward. I wonder the patients did not think that they were delirious when they saw us coming. I had never seen a workhouse ward before, and my first feeling was one of thankfulness that I had only come to disinfect and was not expected to stay there.

There were about eighteen beds, in each was an old man; every patient able to get up in the day had his clothes spread over his bed; there were dirty glasses, cups and saucers, and half-empty bottles of soda-water standing about on lockers; while, crowning horror, the place simply

swarmed with bugs, and the patients' pillows were stained all over where they had smashed them.

Nurse and I set to work to get the poor old men ready for the male nurses. Many of the poor old daddies were thoroughly frightened at the unusual fuss and also cowed at the prospect of a bath which was evidently a luxury they were not used to. I heard our doctor ask the master how often the men were bathed, and he said, "They have a bath when they come in, and the Lord knows when they have one after," and some of them had been in for months! However, when the doctor ordered them each to have a dose of hot whisky and water after their bath there was not one who would not have been willing to have been bathed ten times over!

The bath-room led out of the ward and was about as clean as the rest of the building. The floor consisted mostly of a trap-door, through which the contacts after bathing were taken down a ladder to a non-infected ward. When this

door was open there was so little room that we had to sit on the edge of the bath. We were too busy to think of it then, but it must have been an absurd sight, nurse, myself, the doctor, and the master all sitting in a row on the edge like so many little birds on a bough, while the male nurses took the contacts down.

While we were busy disinfecting, the matron's beautiful white Persian cat strolled into the ward, and doctor insisted on it being bathed in perchloride, from which it emerged pale blue, much to the indignation of his mistress. We got through with them all at last, and at 1 A.M. I arrived back at the contact house, ready to do night duty with the small-pox patient who had preceded me and had been put to bed by the porter in my absence.

This was my first and last experience of workhouse wards; and I may add that the workhouse referred to has now disappeared, and a thoroughly up-to-date building, under proper management, has taken its place.

An Opening for Preliminary Training.

INTERVIEW WITH THE LADY SUPERINTENDENT OF THE ALEXANDRA HOSPITAL FOR CHILDREN WITH HIP DISEASE. BY OUR COMMISSIONER.

THE mere fact that her Majesty the Queen is patron of the Alexandra Hospital for Children with Hip Disease and takes a great personal interest in its welfare would suffice to invest it with interest. But the kind of knowledge which is gained by the probationers engaged in this admirable institution is hardly so well known as it might be. On the occasion of my visit to the hospital, the lady superintendent, Miss E. M. Fitch, told me that a change of some importance has lately been made in the regulations for the admission of probationers.

THE NEW RULE.

"For the future, candidates between the ages of 18 and 27 will be taken for one year's course, but they will receive no salary, and will provide their own uniform and laundry expenses. If they enter for two years, they will receive £12 the first year and £13 the second, in addition to uniform and laundry; but candidates for two years' training who are under 20 do not receive any salary the first year."

"Then you take them at 18?"

"Yes, this institution expressly offers an opening to girls under 20, who want to get into a hospital before they can obtain general training. We do not give certificates, but there are lectures by members of the medical staff on surgical work and general nursing, starting in October and continuing to March. An examination is held at the end of the course. At the end of two years our probationers leave with a good idea of anatomy and with valuable experience in ward work.

THE WARD WORK.

"I see that the children are tied down in their cots?"

"Without exception, owing to the nature of the disease. Every child—there are 68 in the hospital just now—is particularly helpless and has to be washed and dressed. The ages run from three to 12, but the average is between six and seven. The patients being so young, there is no heavy lifting. That obviously makes a difference in the nursing. But the general care of the children is no slight matter, and some of the cases are also bad."

"What are the worst kind of cases?"

"Those of meningitis, but they are very uncommon. We often have cases with many abscesses, and there are a great many wounds, so that there are plenty of dressings to be

done, and as there is no house surgeon the probationers have to help the sisters with them."

"Have you any cases of bed-sores?"

"None at all! We have most beautiful mattresses, specially made and very thickly padded, so as to be very flat. The cots are high, so that there is no work involving backache. The probationers have night duty for three months at a time; they go into the wards at 8 P.M. and leave at 8 A.M., are off duty until 12 noon, and have a night off once a month. There are two probationers on night duty and a sister in charge of the wards. The work at night is usually light, because, except in a certain percentage of patients who wake up and want drinks, the children sleep for hours."

THE DAY DUTY.

"I consider," continued the matron, "that the wards are well arranged for nursing. As you observed in going round, there is a kitchen in the middle of the two wards connecting them on each floor, the wards themselves holding thirty-four cots. Some of the cases are taken out to the balcony which was only finished in 1905. They all do extremely well outside."

"How is each floor staffed during the day?"

"With a sister, a staff nurse who is trained, and four probationers, there being also one probationer available as a relief nurse. The staff nurses and probationers are on duty at 7 A.M., and have supper at 8.15, but they have two or three hours off duty every day, half a day every week, and a day off once a month; also theatre leave once a month till 11.30. The holidays are sixteen days the first year and twenty-three days the second; if possible, I like the probationers to have a holiday when they have been here six months, because it is so important that they should not get fagged out. But there is no rush of cases here, and the work altogether is very level. The nurses, too, are well looked after and have to spend an hour out of doors every day."

THE QUESTION OF DIET.

"Is outdoor uniform compulsory?"

"No, there is a recognised outdoor uniform, but I do not think it is necessary to wear it. Those who wish to wear it get it for themselves and a dress to match, as the cotton dresses may not be worn outdoors. No one is allowed to wear it who has not signed for one or two years."

AN OPENING FOR PRELIMINARY TRAINING—continued.

"Then you have a preliminary period?"

"Yes, all probationers have to come for two months, which are not included in the two years' training; at the end of that time I generally know if a girl is suitable, but she has to be tested for physical fitness by our own physician. This is a very important examination, because of the immature age of some of the probationers."

"Your accommodation for the nursing staff is entirely in the hospital?"

"The hospital was built with that view. The accommodation consists of a very fair dining-room, a comfortable sitting-room with piano, and bedrooms containing two beds. But, as you can judge for yourself, they are large and airy. I lay stress upon the importance of diet. It is too bad to give nurses mutton all the year round, and they have as much variety as possible. The same applies to the patients. For instance, on Sunday the children had cold mutton and milk pudding; on Monday hot roast mutton and milk pudding; on Tuesday fish and bread and butter pudding; on Wednesday steak pudding, custard and prunes; on Thursday lentil soup and treacle roly-poly; on Friday roast beef and milk pudding; and on Saturday soup and jam roly-poly."

AN OUT-PATIENT NURSE.

"How large is your staff?"

"There are an assistant-matron, three sisters, two staff nurses, and twelve probationers. The duties of the sisters are much the same as those in ordinary hospitals. A staff nurse takes a sister's place when she is off duty. Then we have an out-patient nurse. She hunts up the out-patients at their homes and sees that they come to show themselves to the surgeon when it is necessary. I am sure she does a great deal of good. If she finds that

the children are not doing well they come back here or they go into one of our homes. These homes are at Clandon, near Guildford, and at Painswick. There are twenty beds at the former, and the staff consists of a matron in charge, a night nurse, and three day nurses. At Painswick they are supposed to be convalescent children, and the matron in charge has two nurses for the twelve cots."

"You have not been a matron a very long time?"

"Two years."

"MATRON, IS THE QUEEN COMING?"

"I suppose there has been a considerable development of this institution?"

"You mean since the Queen, then Princess of Wales, opened this building in 1899. Before that time nurses had to pay to come here. In the old building there were no wardmaids; the ladies had to scrub the floors. The Queen's interest in the hospital dates from 1881, and also that of Queen Maud, who came here as a small child. We have still some of the Danish toys brought by her Majesty four years ago. She sent sweets on her last birthday, and a small boy, when he heard the news, said, 'Matron, is the Queen coming?' The children are always hoping that she will come again. We have a good many presents sent us, but the clothing of the patients is always a difficulty. They wear things out so quickly. I can always find patterns and sometimes material if kind people will only make the articles."

"Do your probationers on leaving the hospital experience any difficulty in obtaining training elsewhere?"

"I do not think so. I get a great number of applications, but I am very careful to secure, if possible, those who, in the ordinary course of events, should be able on leaving here either to take children's training or, after the necessary age interval, to enter a general hospital."

Strapping a Leg for the Cure of an Ulcer.

EXAMINATION QUESTIONS FOR NURSES.

The question was as follows: "If ordered to strap a leg for the cure of an ulcer, how should you proceed? Describe your preparations, mode of procedure, and finally in what manner should you remove the strapping when necessary."

FIRST PRIZE.

The limb should be cleansed, the area to be strapped shaved, the soap well washed off and the limb thoroughly dried. Then prepare the materials required: Strapping cut into strips not more than one and a half inches in width and about eighteen inches in length, a strapping can or jug filled with boiling water, a bandage, and scissors.

In the case of a brawny callous ulcer the doctor will probably order the whole of the part to be covered in, but in the case of a discharging wound, "a window" to allow of the escape of the secretion and the application of a dressing, should be made, as the strapping will to a certain extent absorb the discharge and irritate the tender edges of the wound.

To strap the whole of the part: The heel should be raised on a support and the nurse stand facing the patient. The strip should be thoroughly heated by holding the plain side against the strapping can, and the centre applied to the back of the limb about two and a half inches below the ulcer, the ends brought over the sides, crossed in front (the inner end crossing the outer) in an upward direction and carried round toward the back. The strapping should fit the limb perfectly without any snipping. The next strip should be applied in the same manner but should overlap the first for about a third of its width, and so on until the limb is covered for about two and a half inches above the wound, where it should be neatly finished off by a strap applied horizontally. Care must be taken that the strapping be applied with even pressure, and firmly enough to keep the

part at rest, but not so firmly as to cause discomfort to the patient. An ordinary bandage should be applied over the strapping.

To strap an ulcer leaving a window: In addition to the materials mentioned before, some shorter pieces of strapping will be required and the dressing ordered for the ulcer. Proceed to strap in the same manner three inches below, and cover to the lower edges of the wound. Then apply the shorter pieces of strapping to the sound part of the limb, leaving the ulcer exposed. The strapping should be cut to fit exactly to the edges of the wound. Above the ulcer the strapping is carried right round the limb again and finished off neatly. The raw surface should be covered with a swab and not left exposed to the air while the limb is being strapped. Then apply the dressing to the ulcer. Boracic ointment is usually ordered, though in some cases good results have been obtained from lint soaked in rubra lotion or picric acid one per cent. Whatever dressing is applied should fit inside the strapping and not overlap at all. Next apply protective and bandage.

To remove strapping. Pass a director under the strapping at the back of the limb and cut with scissors. The strapping can then be removed in one piece, freeing it first from each side, pressing down the skin with one hand while doing so and drawing it toward the centre. It must be very gently detached from the ulcerated part so as not to injure any newly formed tissue. The marks remaining can easily be removed by rubbing with a little olive oil or vaseline (these are less irritating to the tender skin than turpentine, which is usually recommended), and washing with soap and water.

"CHALLIE."

SECOND PRIZE.

To strap an ulcer I would first prepare the strapping, cutting the required lengths an inch wide and long enough

to go round the leg and cross in front. Have ready also some boiling water. Then I would prepare the patient by first thoroughly washing the leg with soap and water and if necessary shaving it, swab the ulcer with antiseptic lotion, and apply a compress the size of the wound, which is removed when nearing the wound with the strapping. Place the leg on a support. If no directions have been given as to the extent of the strapping, commence three or four inches below the ulcer and continue for the same distance above. Pass the non-adhesive side of the strapping round a jug containing boiling water, then fix by its middle to the back of the leg, bring the ends firmly but not too tightly forwards, and cross on the outer side of the leg unless the ulcer is on that side, when the crosses must be made on the inner side, avoiding the prominence of bone. Each succeeding strip must overlap its predecessor by about one-third its width. Very often the ulcer is left exposed so that the dressing can be frequently renewed. The strapping must then be cut neatly around the edges of the wound.

Keeping the crosses even down the side of the leg and avoiding exposing the wound to the air more than absolutely necessary. To remove the strapping, I would first press my finger on the flesh below the strapping, again avoiding a prominence of bone or the site of the ulcer, then slip a director, with its grooved surface upwards, in the indenture made by the finger under the strapping and cut upwards with sharp-pointed scissors, taking care to keep in the groove of the director. Draw the strapping off by both sides in the direction of the wound, to prevent the risk of tearing or breaking down of any union which may have taken place, placing the hand firmly on the patient's skin underneath the strapping when drawing it off, otherwise it is apt to pull the tiny hairs on the skin and cause unnecessary pain. Strapping marks may be removed by oil, and the leg then thoroughly washed again with soap and water.

"DAFFODIL."

THE PRIZE WINNERS.

"Challie" gains the first prize, for she has considered the subject all round. She speaks of the necessity of shaving the leg—this is most important, and the nurse who neglects to do it shows herself a clumsy performer. There is always pain in taking off strapping even if the limb is not particularly hairy, because everyone's legs have more or less fine and almost invisible hairs, but they are enough to cause acute momentary suffering when strapping is taken off. "Challie" also has the right method in removing it, as she says, in one piece, as it is a fatal error to pull off each piece separately, as the larger number of candidates suggest. It is quite right to cut up strapping at the back and pull from both sides towards the ulcer, but this should be done as gently as possible, though firmly, quickly, and without hesitation. "Challie's" window, too, is well arranged, if ordered, but if permitted to do so, I think it is better to enclose the ulcer with the strapping, leaving some perforations for the escape of discharge. If the patient gets up, it is necessary to strap from the toes to avoid swelling.

"Daffodil," who takes the second prize, sends a good and careful paper.

HONOURABLE MENTION.

This is gained by "Pretoria," "X. C. D.," "Yorkshire," "Solitary," and "Emesis." "Pretoria's" paper is very good; "Yorkshire," "X. C. D." and "Solitary," though their answers are otherwise good, all fail in taking off the strapping properly.

THE EXAMINER.

QUESTION FOR FEBRUARY.

1. How would you undress a man who had fractured his left leg?
2. How would you undress a man who had fractured his right arm?

N.B. These two injuries are not supposed to be both on the same patient.

RULES.

The competition is open to all. Answers must not exceed 500 words, and must be written on one side of the paper only, without divisions, head lines, or marginal notes. The pseudonym, as well as the proper name and address, must be written on the same paper, and not on a separate sheet. Papers may be sent in for 15 days only from the day of the publication of the question. All illustrations strictly prohibited. Failure to comply with these rules will disqualify the candidate for competition. Prizes will be awarded for the best two answers. Papers to be sent to "The Editor," with "Examination" written on the left-hand corner of the envelope.

In addition to two prizes, honourable mention cards will be awarded to those who have sent in exceptionally good papers.

N.B.—The decision of the Examiner is final, and no correspondence on the subject can be entertained.

Any competitor having gained three prizes within the current year shall be disqualified from taking another until 12 months shall have expired since the first prize was gained.

Clapham Maternity Hospital.

THE open examination of the Clapham School of Midwifery, which is held three times yearly, took place on Saturday last, and thirteen candidates presented themselves for the usual threefold examination—namely, written, *visu voce*, and clinical.

Of these, two passed "with honour"—i.e., with above fifty marks, sixty being the maximum obtainable—seven "passed," and four failed, the failures being those who did not obtain full two-thirds of the maximum marks. The following are the names of those who obtained certificates:—

Miss Caroline Green (Madras), Miss Catherine Bone, Miss M. R. Parsons, Mrs. Winifred Hanson, Miss Ellen Beadon, Miss M. Scoresby Jackson, Miss Elize Theriksen (Denmark), Miss A. B. Northcote, and Miss C. Watney.

The questions of the written examination are appended:—

1. What are the causes of retention of urine during and after labour? Describe in detail how you would pass a catheter, and what precautions you would take.
2. What do you mean by tonic contraction of the uterus? How would you distinguish it from uterine inertia? What is the difference in the treatment which is called for?
3. What are the points to be noticed in making
 - (a) A vaginal examination;
 - (b) An abdominal examination
 in a woman who is in the first stage of labour?
4. What do you mean by uterine inertia? What are its varieties, and what are the causes which give rise to them?
5. How would you diagnose abscess of the breast? How is it caused and prevented?
6. What is meant by post-partum hæmorrhage? How should it be prevented, and how should you treat it?

International Conference on the Prevention of Infantile Mortality.

THE second International Congress of Gouttes de Lait will be held in Brussels from September 12 to 14, under the patronage of Prince and Princess Albert of Belgium, and many well-known people are taking the greatest interest in the work, which is threefold. First, to give advice; secondly, to encourage breast-feeding; and, thirdly, to distribute milk to those infants to whom breast-feeding is either impossible or insufficient. The Congress has already secured a large membership on the Continent, and the committee hope that England will be well represented. Correspondence on the subject should be addressed in London to Dr. G. F. McCleary, Medical Officer of Health, Town Hall, Hampstead, N.W.

London Biblewomen and Nurses' Mission.

THE JUBILEE.

THE second public meeting to commemorate the Jubilee of the London Biblewomen and Nurses' Mission was held on Tuesday last at Caxton Hall, Westminster, when a very large gathering assembled. The chair was taken by the Earl of Harrowby, and the proceedings commenced by the singing of Schubert's "The Lord is my Shepherd," and "Thou Whose Almighty Word," followed by prayer.

Lord Harrowby then addressed the meeting. He said that the work of the mission had up to the present been carried on in an unobtrusive manner by a committee of enthusiasts, and it was now felt that the time had come to make a general appeal, as it was necessary to get new members and helpers to replace many of the original. They wished to raise a jubilee fund of £10,000, half of which should be devoted to the General Fund, and half to the building of a new Hostel for the workers and the endowment of the Convalescent Home at the seaside. It was also necessary to increase the amount of annual subscriptions. The annual income of the society was £12,000, and the expenses £14,000; though the deficit had till now been covered by legacies. There were eighty-five Biblewomen and seventy nurses employed, and the work of the society was carried on in such a business-like, thorough way that the more investigation one gave to it the more strongly did its needs appeal to one.

THE BISHOP OF LONDON'S TRIBUTE.

The Bishop of London, in praising the splendid work of the mission among the very poor, drew a picture of the conditions under which the work is carried out. He said he was competent to tell the meeting of the condition of the dwellers in the East End, as for nine years he had practically lived with them. And the first thing which impressed the worker was the grinding poverty which prevailed. He did not know which was the most pitiable—the man who for weeks tramped London trying in vain to find employment, or the wife who hoped to be able to provide a dinner, or the little ones who begged their mother for bread. Then there was sickness to contend with. He agreed with Sir Frederick Treves, who at the last public meeting of the society had said that it was impossible to deal with all sickness by the hospital. There was much remedial sickness which could have been prevented if attention had been given twelve months earlier. There was also much wastage of life and health due to the fact that patients were discharged from the hospital, and the home conditions nullified the benefits of treatment. It was in encouraging the patients at home and tactfully advising them that the society's nurses did so much to help them. And with regard to the spiritual side of the society's work, the poor needed someone to bear to them a torch of light and to show them what a good woman was. There was a great fog of indifference about spiritual matters, and the poor often resented any suggestion of spiritual help, so that great tact was required in dealing with them. But under this fog he discerned many signs of hope both in respect to the work of the nurses and the Biblewomen, and he was sure that many of those present could tell of instances where they had been the means of bringing health to the poor and of gradually influencing them on the moral side. Those who had actually faced the difficulties were those, indeed, who had the greatest hope for the future. He had not seen much of the working of the society in Bethnal Green, probably because there were already associations for nursing in that

district, but he had had testimony to the value of the work they were doing, and read a letter from the Vicar of Shoreditch which spoke very warmly of their assistance. He himself was struck by two or three points in the work of the society. Firstly, they required both the nurses and the Biblewomen to be trained; secondly, they were not a mere dole-giving agency, since no less a sum than £30,000 had during the past fifty years been collected from the poor for the purchase of Bibles. And, lastly, their work was interdenominational—not undenominational—and they all welcomed it as such. Their work was not in vain, and he was very glad to wish them Godspeed.

Canon Walpole stated that he came as witness to the work of the society, and could speak from his own experience in Lambeth of the great good it was accomplishing. He spoke of the heroism displayed by the poor, and added that what they so largely needed was contact with good people. We must multiply our agencies a thousandfold if we wish to really gain London for good; in Apostolic times every Christian was a worker, and we ought to approach nearer to this ideal at the present time.

PROFESSOR CLIFFORD ALBUTT ON THE WORK.

Professor Albutt said it was by the happiest accident that he had heard Miss Andrews speak at a friend's house on the work of the society, and he had been so impressed by the value of its efforts that he had determined that, even if owing to his multifarious duties he could not help them in any substantial way, he would do his best to induce others to help them. They worked on the principle that the soul and the body interpenetrated each other, and such a principle, if carried out, as he knew it was carried out by this society, could not fail to have fine results. He said that the human body had passed through long ages of perfecting until it had become filled with life. Not so the body politic—there were yet large masses unassimilated, full of good and nutrition but unused, and no one knew better the enormous quarry of good value thus unused, owing to the want of good influences, than those who actually worked among the poor. So long as masses remained outside the body politic, they were apt not only to fall into disease, but also to cause disease to the body itself. Some portions had fallen into a kind of atrophy and they needed quickening from the centres of life. The hospitals might, from his point of view, be regarded as the centres of life, and they wanted ramifications from the centres to the large outlying masses; and he could conceive of no system calculated to better achieve this end than the one under which they were working. He drew attention to the fact that a three years' hospital course was to be an essential, they hoped, in future, and when this was so they would have a body of past workers of very long experience and new workers thus thoroughly equipped. He pointed out that in dealing with out-patients at a hospital he had often felt how small a part the medicine prescribed was to play; it was the home life which made for vitality, and what they wanted was the reconstruction of home life. There was the sphere of "after-care," of which the convalescent home was the symbol, and to allow patients to return home without further help and guidance was not only unkind, it was stupid. And there was one thing in the home above all others which militated against health. That was the use of alcohol. He was no fanatic on the matter, but that a fairly decent working man should spend four or five shillings a week out of a wage of twenty shillings was altogether disproportionate. And beyond the care of the body there was the care of the soul. There were these two aspects of therapeutics, and it was impossible for us to be one-sided only in our work. It was useless, comparatively speaking, to bring mere material medicine to a man

W. B. KESTEVEN, M.D., F.R.C.S., says: "The difference of individual constitution that has most direct relation to the course and terminations of disease is in point of strength or weakness. All habits of life that tend to induce exhaustion of nervous energy have a necessarily debilitating influence. It follows that our principal aim should be to assist Nature rather than attempt to coerce her."

"Wincarnis" assists Nature by virtue of invigoration.

R. V. PIERCE, M.D., says: "Unto us are committed important health trusts, which we hold not merely in our own behalf, but for the benefit of others. Success in the treatment of the sick requires good nursing. Without it the most skilful physicians fail to effect a cure; with it the most unqualified may succeed. It should be the study of the nurse to devise such nourishment as will be acceptable to the patient and suitable to the condition."

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"Wincarnis" administered in small but oft-repeated doses will be found of immense service in such cases, and suitable because of its delicacy.

And it is but justice to say a word on behalf of the nurse herself: she, too, is a human being, subject to exhaustion from overwork, and needs recuperation.

The office of nurse is an arduous one at best, and the long weary hours of night-watching should be compensated by building up the blood with "Wincarnis," to serve as a safeguard against disease. "Wincarnis" is just as good for the doctor and nurse as for the patient.



THE OPINION OF THE DOCTOR

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"A. C. J—, Surgeon."

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"Yours faithfully,
"H. G. H—, M.R.C.S.Lond."

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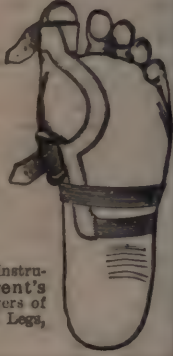
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unless one could also bring medicine to the mind. This is what this society recognised, and he felt that the work could be better done by simple Biblewomen than by members of sisterhoods who were apt, he thought, to be the less helpful as nurses because they worked partly for an organisation behind them and often caused a man to be suspicious that a design was being made upon his soul.

The meeting concluded with short speeches from Lord Kinnaid, the Rev. A. Taylor, and the Rev. David Fyfe.

Everybody's Opinion.

WHO SHOULD PAY?

"VERNE" writes: If a nurse contracts varicose veins through so much going up and down so many stone stairs during the day from one ward to another, and is told by the chief doctor and matron to have an elastic stocking, should that be provided by the hospital or ought the nurse to provide the cost from her own purse?

A PROBATIONER LOSES HER SIGHT.

"AN OLD MILDMAY NURSE" writes from Alton, Hants: I beg to enclose postal note for a shilling in aid of the unfortunate probationer who nearly lost her eyesight in the West Ham Infirmary recently.

"POLICY NO. 14203. ROYAL NATIONAL PENSION FUND FOR NURSES," writes: I enclose postal order for two shillings. Can I trouble you to have it forwarded to the probationer who lately met with the accident which has left her unfit for her work? I am very sorry for her. I only wish I could send her a larger sum.

"M. R." writes: I have the deepest sympathy for the probationer nurse who has lost her eyesight through a poor helpless patient suffering from typhoid fever spitting in her eye, and I will gladly send my mite towards anything to help her. But how is it that those who employed her do not compensate, as far as lies in their power, one who is suffering from a calamity caused while she was attending a sick person under their care? Surely the Local Government Board know of the case? [Perhaps the probationer might like to take a thorough course of massage lessons, when she is well enough. That would not be so bad as giving up entirely the work she loves; and if she became efficient she would soon get a good connection.]

SUICIDE OF A PROBATIONER.

MR. JAS. NASMYTH ROBERTS, The Cottage, Cumberland Road, Hanwell, W., writes: In reference to the inquiry into the death of my niece, Nurse Margaret Kathleen Roberts, reported in your issue of the 9th inst., may I ask you, on behalf of the family of the deceased, to give publicity to their emphatic protest both against the views expressed by the coroner and doctor at the inquest and the verdict of the jury. I was not present at the inquest, but I have been furnished with a fairly full note of the evidence given thereat which to my mind leaves, to say the least, very considerable doubt as to whether Nurse Margaret Roberts took the drug with intent to poison herself. The evidence seems to point the other way. The entire absence of any real trouble, the utter want of reason for the act (the matron's reproof supplies too weak a motive), the nature of the drug taken—strychnine, well known as a tonic and in a bottle not labelled "poison"—taken from a cupboard containing bottles of other better-known and less painful poisons labelled "poison" (or at least let us hope so) together with other drugs non-poisonous in their action, the replacing the bottle and rclocking the door, the messages to the matron—sent immediately the drug was taken—to come to her, her earnest appeals to be saved from death, and particularly the absence of any letter or message to any of her family, all negative the intent to kill herself and point directly to the truth of the theory that the poison was either taken as a tonic, or with a view of frightening the matron (her friend), with whom she had quarrelled, and without knowledge of the strength of the preparation she was taking. This view, in the absence of absolute proof to the contrary, is at least as likely a tone as the theory of suicide, in support of which the chief fact was that the girl had a passionate temper, which seems to have, from the very first been openly adopted by the hospital authorities,

and followed as a matter of course by everyone else concerned except the unfortunate relatives. It has also the merit of being the most merciful one, and in matters of this kind where there is any doubt it is usual to grant the benefit thereof. It is a matter of regret that the family were not legally represented at the inquiry, as they certainly would have been had they had the slightest idea that the evidence which would be tendered by the hospital authorities would be so markedly one-sided. Had anyone been in attendance on behalf of the family, who could have cross-examined the witnesses and analysed the evidence, the strong probability is that a verdict of misadventure would have been returned. On behalf of the family I am endeavouring to secure an inquiry by the committee of the hospital into the whole of the circumstances surrounding the death with a view of thoroughly sifting what actually did happen in the hopes of vindicating my niece's character, and also as a matter of public duty, for I refuse to believe that in any properly conducted hospital it could be possible for a young and very inexperienced nurse to obtain access to poisons in this way, whether for a proper or an improper purpose. The family desire to be absolutely just to all concerned, and, therefore, pending my application for an inquiry, I will simply confine myself to the above protest, which I trust in all fairness you will be good enough to publish.

NURSES' EARNINGS, SAVINGS, AND SICK-PAY.

"A GRATEFUL member of the Royal National Pension Fund for Nurses" writes: It appears to me that many nurses would feel much happier if they decided to join the Pension Fund for Nurses and also the sick-pay branch of the Fund. They would then know that they were making a provision for the future, and also that in case of illness they would receive sick-pay sufficient to help them to pay for their medicine and their other incidental expenses, if not to wholly provide for their comfort during the time they are unable to work. It is not easy to save the amount of the monthly, quarterly, or yearly payments out of a nurse's salary, or her fees at a private case, but with a little self-denial it can be done; and when once one has started, it becomes a habit to put aside the amount of the premium first, and to manage with the balance in hand to meet all other demands. As one who has tried, and has also received great benefit from the Fund, and from the sick-pay branch of it, I gladly bear testimony to the help it has been to me. For two or three years I paid in for what would have been sufficient for a fair annuity; then circumstances made it necessary for me to withdraw the whole of the amount which I had paid in. After a short time I felt that I was again able to pay into the Fund, and I therefore applied to the Secretary for a new policy; also for one for sick-pay. Both were granted, and although I have had to borrow a small sum from the Fund on two occasions, I have not had to take the whole of the money out again, and I have repaid the amount which I borrowed on my policy. I am quite sure that I should not have saved any money had I not been obliged to send it to the Pension Fund, for, like many other nurses, I think I often want things which I can do without. This year my health has not been good, and I have had to apply for sick-pay, and also to ask the advice of our kind medical referee, Dr. G. W. Potter, to whom my sincere thanks are tendered for the advice which he so courteously gave me, and the prescription which has done me so much good. The small sum from the sick-pay coming so regularly has helped me, with the amount which I had in hand, to tide over what would otherwise have been a very anxious time; and I am only too pleased to tell other nurses of the benefit the Fund has been to me. I can promise them the greatest courtesy from the Secretary and his staff, who are always ready to answer all questions, that those who join may know exactly what they have to pay, and the benefit they will receive for their payments. It must be rather disappointing that so few nurses attend the annual meetings* of the Fund. The great and personal interest which Mr. Everard A. Hambro and all those who speak at that meeting take in the nurses and their welfare cannot be realised until one has been present at a meeting and has heard and seen for herself.

* NOTE.—The annual meeting will be held this year at River Plate House, Finsbury Circus, close to Moorgate Street Station, on Thursday, March 21 next. ED. THE HOSPITAL.



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Appointments.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.—Miss Gregory has been appointed night sister. She was trained at Hertford Infirmary. She has done several years' private nursing, and has been staff nurse at Addenbrooke's Hospital since November 1905.

BELPER WORKHOUSE INFIRMARY.—Miss K. M. Underwood has been appointed superintendent nurse. She was trained at Birmingham Infirmary, and has since been theatre sister and maternity sister in the same institution.

BIRMINGHAM INFIRMARY.—Miss Shaw has been appointed sister. She was trained at Hertford Infirmary, and has since been staff nurse at Addenbrooke's Hospital, Cambridge.

CHICHESTER INFIRMARY.—Miss C. Bunting has been appointed night sister. She was trained at Addenbrooke's Hospital, Cambridge, and has since been theatre nurse in the same institution.

DARLINGTON HOTEL AND DISPENSARY.—Miss Miriam Ashley has been appointed lady superintendent. She was trained at the General Hospital, Birmingham, where she has since been Sister. She has also been night superintendent at the Royal Infirmary, Bradford, and assistant-matron at the Royal Halifax Infirmary.

LAMBETH POOR-LAW INFIRMARY.—Miss Band has been appointed sister. She was trained at Addenbrooke's Hospital, Cambridge.

LINCOLNSHIRE NURSING ASSOCIATION.—Miss Margaret M. White has been appointed superintendent of this Association, which is affiliated to Queen Victoria's Jubilee Institute. She received her district training under the Scottish branch in Edinburgh, being appointed Queen's nurse in July 1900; since that date she has held various posts as Queen's nurse in Scotland.

PRINCESS ALICE MEMORIAL HOSPITAL, EASTBOURNE.—Miss Bessie F. Potter has been appointed sister. She was trained at the Royal Surrey County Hospital, Guildford, and has since been staff nurse at the Hospital for Sick Children, Great Ormond Street, Bloomsbury.

READING INFIRMARY.—Miss Maud Emmeline Large has been appointed charge nurse. She was trained at Epsom Union Infirmary.

STAFFORDSHIRE COUNTY NURSING ASSOCIATION.—Miss Margarete Egestorff has been appointed superintendent of nurses to this Association, which is affiliated to Queen Victoria's Jubilee Institute. She was trained at Radcliffe Infirmary, Oxford, and for district nursing by the Metropolitan Nursing Association, Bloomsbury Square, London. She has since been sister at University College Hospital, London, and Queen's Nurse in Gower. She holds the C.M.B. certificate.

ST. MARY'S COTTAGE HOSPITAL, TENBURY.—Miss J. Hewett has been appointed matron. She was trained at the Metropolitan Hospital, Kingsland Road, N.E., where she was afterwards holiday sister. She has since been charge nurse at the Devon and Cornwall Homœopathic Hospital and Three Towns Dispensary, Plymouth; nurse and holiday matron at the West of England Nurses' Co-operation, Plymouth; and sister at the Royal Hospital for Incurables, Putney Heath. She has also done massage, electrical, and gynaecological work.

STROUD HOSPITAL.—Miss Edith Bruce has been appointed charge nurse. She was trained at the Royal Infirmary, Glasgow. She has since had charge of the women's ward of the Midmay Memorial Cottage Hospital, and has been staff nurse at the Brighton Throat and Ear Hospital. She has also done district work.

Midwives' Defence Union.

THERE was quite a crowded meeting at the Midwives' Institute on Friday last, in response to an announcement that a special discussion would be opened on the subject of a "Midwives' Defence Union." Dr. Atkinson took the chair, but the discussion was regarded as private until the aims and plans of the proposed Union can be more matured. Meanwhile a committee was appointed to inquire into the matter. At the close of the meeting the Chairman expressed a hope that when the Defence Union is fairly launched the Press will give all possible publicity to the matter, and that the nursing and midwifery papers will encourage correspondence on points of difficulty between town and country members.

Death in our Ranks.

THE death of Miss B. C. Morris, a nurse at Wolverhampton Workhouse Infirmary, took place a few days ago, and at her funeral on Thursday last at Rugeley a number of the Wolverhampton Guardians, the medical officer, nurses, and other officials were present.

The Nurses' Bookshelf.

THE NURSES' "ENQUIRE WITHIN." By C. O. M. (London: The Scientific Press, Limited. Pp. viii. and 166. Price 2s. net.)

THIS is a small pocket encyclopædia giving information about diseases, symptoms, and nursing treatment. It is arranged alphabetically so that readiness of reference is secured. There is no attempt to supplant the larger, systematic text-books on nursing; the proposal is to provide a reference book which can be kept always at hand and to which an appeal may be made in an emergency. The "Enquire Within," we think, fully justifies its own existence. It is well arranged and carefully and lucidly written. The least successful section is that dealing with "medicines." To speak about "drop doses" of strychnine, mercury, and sulphuric acid, is to run the risk of serious error. But in its special domain this book will, we are sure, have a large opportunity for usefulness.

"The Hospital" Convalescent Fund.

THE Hon. Secretary begs to acknowledge with thanks the receipt of 2s. 6d. from L. B. Marsh and 2s. from Miss N. Garner.

Wants and Workers.

WILL any kindly disposed person possessing a wheeling chair for which they have no further use be good enough to give it to a very poor girl, who has never walked from birth? At present her only means of locomotion consists in jerking herself about on an ordinary rocking-chair. Carriage would be gladly paid.—Address, Sister Thomas, Trevecca College, Talgarth, Breconshire.

INFANTS' WEIGHT CHART.

THE price of the weight-chart brought out by W. H. Bailey and Son, Ltd., 58 Oxford Street, W., which we noticed last week, is 6d.

Notes and Queries.

REGULATIONS.

The Editor is always willing to answer in this column, without any fee, all reasonable questions, as soon as possible. But the following rules must be carefully observed.

1. Every communication must be accompanied by the name and address of the writer.
2. The question must always bear upon nursing, directly or indirectly.

If an answer is required by letter a fee of half-a-crown must be enclosed with the note containing the inquiry.

Massage.

(210) Can you tell me of the nearest place to Doncaster where I can get massage training?—*Dodo*.

Write to the Incorporated Society of Trained Masseuses, 12 Buckingham Street, Strand, where you may obtain information.

Home for Aged Man.

(211) Can you tell me of a home for a man of 69, who has a pension as workhouse master?—*Maidenhead*.

The Homes for the Aged Poor (apply to Misses Harrison, 86 Penge Road, Anerley, S.E.) might be suitable, or Nazareth Home, Hammersmith, might receive him when he is 70.

Nursing Administration.

(212) Can you inform me if a Select Committee of the House of Commons or other authority has been recently convened to inquire into nursing administration? If so, where can I get the Blue-books?—*Oldham*.

A Committee of the House of Commons sat in 1891, and the results of this and the House of Lords' Commission on Hospitals can be procured from Messrs. King and Co., Westminster. A good deal of evidence was elicited during the recent inquiry into the pros and cons of State Registration. You can probably also get this at King's.

Embrocation and Irritation.

(213) (1) Would it be possible for Roche's embrocation to leave a rash and roughness on a child after using it only two or three times two years ago, when at the age of six months: or might the rash be from other natural causes? (2) If so, what can I do to get rid of the rash and roughness?—*M. H.*

(1) We think the irritation caused by some embrocations is likely to set up an eczema, which may become chronic. It is therefore dangerous to apply advertised embrocations to the delicate skins of young children. (2) Consult a medical man, or take the child to a hospital.

A Bed for a Case of Rheumatic Arthritis.

(214) I venture to ask your advice upon a bed suitable for a severe case of "rheumatic arthritis." The patient has for some time been lying upon a water rubber bed, only filled with air, and last week was put upon the latest air bed. But we find now that the pressure of the corrugation under the thighs causes very much pain and elevates the feet and legs to a higher level than that of the back.—*Punay*.

Probably the bed has not been distended enough. It should be quite full and absolutely without leakage; otherwise wrinkles are sure to be made and the patient to sink down in the bed in a most uncomfortable condition. If the air-bed cannot be made comfortable better resort again to the water-bed.

Competition Prizes.

(215) Can you tell me of the value of the prizes awarded to successful candidates answering the nursing questions in THE HOSPITAL. I have been competing with success.—*E. M. D.*

As you have been a successful competitor, you will before now have had a list of books with values, etc., sent to you.

Oxygen.

(216) I should be glad to know how to administer oxygen.—*Inquirer*.

You must not do anything until you have been instructed by a medical man.

Handbooks for Nurses.

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| "A Handbook for Nurses." (Dr. J. K. Watson) ... | 5s. 4d. |
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| "Surgical Instruments and Appliances Used in Operations," illustrated. (Harold Burrows, F.R.C.S.) ... | 1s. 8d. |
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For Reading to the Sick.

"BE THOU NEAR US."

FROM darkness here, and dreariness,

We ask not full repose :

Only, be Thou at hand, to bless

Our trial hour of woes :

Is not the pilgrim's toil o'er-paid

By the clear rill and palmy shade?

And see we not, up Earth's dark glade,

The gate of Heaven unclose?

Keble.

The Holy Ghost is given; we may be partakers of His Presence; our life may be a training, a renewing, a carrying out of His work; every temptation may be to us as the graving of the Hand of God. In prayers and watchings, in self-denials and aspirations, in blessings received meekly and used thankfully, in pains and griefs borne without repining and made by patience as steps upwards; in all of these a life of God may in very truth be ours. God may be, will be, unless we will it not, working upon us, re-making us, fitting us for the open vision and the full enjoyment of Himself.—*Bishop S. Wilberforce*.

Sharp suffering is so separating a thing, it does so truly set the sufferer alone, that it is oftentimes too strong for merely human sympathy. The stricken will be the lonely hearted; but from His sympathy, from the unseen but most real visitations of His blessed Spirit, it cannot part us.⁴ Nay, it is to the faithful a living discipline, which wounds indeed for the present their aching senses, but which more than anything besides brings them near to Him. They taste the fellowship of the Man of Sorrows. Their anguish is as a wall built up between them and others, but within that wall, as into a shrine, He will come Whose Presence is all joy. On Him, too, are the abiding marks of a like affliction. Pierced Hands and a wounded Side; these are the tokens of His fellowship with sufferers; and still, as of old, to those whom He has withdrawn into that same Sanctuary, He showeth His Hands and His Feet, until they are ready "to believe not for joy, and to wonder" at the grace vouchsafed unto them.—*Ibid.*—*Bishop S. Wilberforce*.

Surely this should be the law of your life, the fixed habit of your soul. If union with Him be true, in trust, in love,—the thought that He knows all, that He is present, that He comes with special grace to heal, to soothe, to support, apprehended by a vivid act of faith, would have power to sustain the soul, would grow to be a settled support, a stay in the midst of every trouble, a sufficiency of strength, a power against inward disquiet and what remains of self to drag down the spirit.—*T. T. C.*

Thrice bless'd are they, who feel their Loneliness;
To whom nor voice of friends nor pleasant scene
Brings aught on which the sadden'd heart can lean.
Yea, the rich earth, garb'd in her daintiest dress
Of light and joy, doth but the more oppress,
Claiming responsive smiles and rapture high,—
Till, sick at heart, beyond the veil they fly,
Seeking His Presence Who alone can bless.

Newman.

The Hospital.

Nursing Section.

Contributions for "THE HOSPITAL," should be addressed to the EDITOR, "THE HOSPITAL"
NURSING SECTION, 28 & 29 Southampton Street, Strand, London, W.C.

NO. 1,068—VOL. XLI.

SATURDAY, MARCH 2, 1907.

Notes on News from the Nursing World.

NURSES AND THE WRECK OF THE "BERLIN."

As soon as the wreck of the *Berlin* off the Hook of Holland was made known several nurses were despatched from Rotterdam to tend any sufferers who might need their services, and to prepare the dead for burial. The care bestowed by the nurses on the passengers in their terribly exhausted condition was admirable, but they were so affected by the sight of their patients that they found it difficult to refrain from tears. At the piteous request of a young girl in the crowd, who found it impossible to get any definite information, one of the nurses made inquiries for her missing relative, and had to break the news that he was not among the rescued. On Saturday the Amerika Hotel was besieged by people anxious to obtain a glimpse of the survivors, and vigorous measures were required to secure for the medical men and nursing staff the privacy and quiet needed for the convalescence of their patients.

LORD ROBERTS ON THE WORTH OF NURSES.

THE members of the Ascot Benefit Nursing Association had the pleasure last Friday of hearing a speech from Field-Marshal Lord Roberts, who affirmed that "his knowledge of the worth of nurses in South Africa was enough to fill him with gratitude." He remembered the time when there were no nurses in South Africa, and when antiseptic treatment and the use of anæsthetics were practically unknown. Contrasting his Indian experiences with those in South Africa, he said that for the first two or three months of the siege of Delhi, not a single case of amputation survived, and at Lucknow the death statistics were very similar. In fact, it would hardly be possible to describe what the wounded and sick suffered during the Indian campaign from the overpowering heat, the swarm of insects, the stench, the lack of surgical and medical treatment, and the want of proper nursing. During the South African War a totally different state of affairs prevailed, and the presence of trained nurses materially contributed to the difference.

NURSING QUESTIONS AT THE POOR-LAW CONFERENCE.

At the Central Poor-law Conference in London last week, the question of the nursing of the outdoor poor and the administration of the Midwives Act in rural districts was discussed. It was introduced by Mrs. Charles Hobhouse, Hon. Secretary of the Wilt-

shire County Nursing Association, who, as to the first point, urged that the simplest and cheapest method of meeting the demands of relieving officers for nurses for the outdoor poor is for Guardians to subscribe to any nursing associations in their Union; and as to the second, that unless action be forthwith taken by public bodies or voluntary effort to provide a sufficient supply of competent midwives, Guardians will be called upon to pay extremely heavily for the services of medical men to meet the requirements of the Act. Subsequently, Dr. J. M. Rhodes moved, that in the opinion of the Conference, the Local Government Board should at once take steps to secure the licensing of competent Union hospitals to train midwives so as to meet the demand that at present exists, "all midwives to pass the same examination." This resolution was carried unanimously. We are glad that Dr. Rhodes recognises the importance of maintaining one standard for midwives.

OVERWORKED NURSES AT SWANSEA GENERAL HOSPITAL.

THERE was a long discussion last week at the meeting of the Swansea Hospital Board on a proposal by the House Committee to appoint three additional probationers. In support of the proposal, Colonel Morgan mentioned that since August not one of the night nurses had had a single day's holiday, and the matron had told him that she could not release them for some time yet; while the Chairman, Mr. D. W. Hughes, declared that he would rather face the music at the Council meeting for increasing the expenditure than explain to the community why they were over-working the nurses. The report of the matron was then read, and she stated that the staff had been inadequate for some time; that the monthly day off or night off had frequently not been given; and that she was still being called upon to give last year's holidays. We are glad that it was determined to augment the staff as proposed. But the addition ought clearly to have been made earlier. No hospital of repute should expose itself to such a damaging admission as that of the Chairman at Swansea, who, in his speech, confessed that the authorities had been guilty of "sweating," and said that he was "actually ashamed of himself."

A WISE DECISION AT NORTHAMPTON.

At the annual meeting of the Northamptonshire Town and County Nursing Association held on

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28 & 29 SOUTHAMPTON STREET,
STRAND, LONDON, W.C.

Thursday last week it was announced that the Committee of the Queen Victoria Nurses' Home have resolved, after many meetings and much discussion, to relinquish private nursing in connection with the Institute. The Chairman, in making this statement, said that the Committee found that the district work of the Association had become so large that it was quite impossible to carry on any private nursing. There was an opportunity to hand over the latter to the General Hospital, and they had come to the determination to avail themselves of it. We are sure that a very wise decision has been arrived at. The report for 1906, which was adopted, shows the extent of the district work, and also that it is increasing. The number of cases nursed in 1906 was 601, as against 565 in 1905; and the number of visits paid was 18,017, as against 16,466. It will readily be understood, as the Chairman indicated, that to arrange the private nursing in addition has involved great responsibility and much trouble. We entirely share his opinion that it is better to concentrate attention on the district work, especially as it is intended to extend it to maternity nursing, for which there is a great need. We always regard the combination of private with district nursing as a mistaken policy, and the abandonment of a system which has admittedly broken down at Northampton is a matter for congratulation.

ALIENATING PUBLIC SUPPORT.

THE Bishop Auckland Guardians have some reason for declining to contribute to the District Nursing Association, if, as "A Twenty Years' Resident" assured us last December, the committee require the nurses to attend the wealthy for the reduced fee of 15s. A long interval has elapsed since this statement was made, but we have not received any contradiction, although we invited one; and the fact that in the annual report the words "sick poor" are omitted, tends to confirm the allegations that the mistaken policy of employing public subscriptions for the purpose of securing cheap nursing for the well-to-do is being pursued. It is not surprising that District Nursing Associations which expose themselves to criticism do not enlist the maximum of outside sympathy. A difficulty has now arisen in connection with the Wolsingham Association, which is in open conflict with its nurse. The nurse, it appears, is accused of prejudicing the patients of a medical man and of questioning his treatment, with the result that her resignation has been demanded. She has, however, a number of supporters in the district, and they threaten to elect a council who will re-engage her. In the interests of the nurse we believe that this would prove a regrettable step for her supporters to take. The success of district nursing depends so entirely on amicable relations being established between the medical men and nurses, that when friction arises, as may happen without much fault on either side, unless the subscribers can adjust matters, the only dignified course for the nurse to pursue is to waive the whole matter in dispute and take up work elsewhere under more congenial conditions.

EXETER GUARDIANS AND NURSES.

At a meeting of the St. Thomas (Exeter) Board of Guardians last week it was reported by the Visiting Committee that, in accordance with resolutions passed by the Guardians at the last meeting, the clerk had submitted a statement of the changes in the nursing staff since January 1, 1905. The Committee recommended the Guardians to appoint a superintendent nurse instead of a head nurse for the sick wards, such superintendent nurse to have full charge of the sick inmates and the supervision of the assistant nurses, without any direction from the matron. The salary of the superintendent nurse to be fixed at £34, rising by yearly increments of £1, to £38 per annum. The report was adopted. At a previous meeting the Guardians declined to allow an assistant nurse who had obtained another appointment to leave without notice, as it would be a bad precedent to establish. It was reported that the nurse in question had paid a month's salary in lieu of notice and left the institution.

IMPERIAL MILITARY NURSING SERVICE.

MISS R. BEAMISH and Miss C. E. A. Harries have been appointed staff nurses in Queen Alexandra's Imperial Military Nursing Service; Miss B. M. Nye has been appointed to the Royal Herbert Hospital, Woolwich, instead of the Royal Victoria Hospital, Netley; Miss M. C. Watson, to the Royal Herbert Hospital, Woolwich; Miss M. H. Smyth and Miss E. McGrath, to the Millbank Hospital, London; and Miss R. Bramish, to the Cambridge Hospital, Aldershot. Miss K. Coxon has been transferred to the Military Hospital, Portsmouth, from the Cambridge Hospital, Aldershot; and Miss M. A. Cachemaille, to the Cambridge Hospital, Aldershot, from the Military Hospital, Portsmouth. The appointments of Miss V. L. Batterson, Miss A. M. Clapp, Miss M. H. Congleton, Miss A. R. Sibbald, and Miss H. Winzer have been confirmed. Sisters B. S. Vaughan and C. K. E. Steel have arrived from South Africa.

THE QUESTION OF PASSES.

At the last meeting of the Keighley Guardians it was proposed to abolish the passes. One of the Guardians said he thought that it was humiliating for a nurse to have to make application to the matron when it was "her day out"; and in order to illustrate the waste of time and money, he mentioned that in a single fortnight no fewer than a hundred passes had been required. He described the system as tyrannical. The only defence of it is that it was introduced five or six years ago owing to irregularities. The matter was ultimately referred to the Infirmary Committee to discuss and report upon to the Board. In a well-managed institution passes are not necessary, and in one that is not well managed we doubt whether they are of any practical value. They cause irritation without ensuring a compensating advantage.

MISS NOTT-BOWER AT GUY'S HOSPITAL.

On Wednesday evening last week Guy's Hospital Nursing Society held an interesting meeting in the Court Room. The chair was taken by the Chaplain,

the speaker was Miss Nott-Bower, a former matron of Guy's. She gave a very graphic and comprehensive account of her work among the navvies of Grahamstown, South Africa, which she took up soon after she left London in 1900. She spoke of the difficulties and charms of the nursing and mentioned that the caravan locomotive, which is the chief method of travelling, is attachable to trains and is conveyed free, so that the nurses may reach the very scattered homes of the navvies. The caravan is often left on a siding and forms the nucleus of a district. Miss Nott-Bower said that more volunteer mission nurses amongst these people are much needed. The collection was for the funds of the Navy Mission.

THE RECOVERY OF MISS LOWE.

WE are glad to learn that Miss Lowe, the member of the Nurses' Co-operation who was murderously attacked in the Mont Cenis Tunnel a few weeks ago, was discharged from the hospital at Chembury on Sunday. She has quite recovered, and left at once for Paris in company with the nurse who was despatched from New Cavendish Street to attend upon her. At the outset the friends of Miss Lowe were afraid that the injuries inflicted by her assailant might have serious results, but these forebodings have happily not been verified, owing largely, no doubt, to the skill of the medical man and the care with which she has been nursed.

ROYAL HANTS COUNTY HOSPITAL.

At a meeting of the Governors of the Royal Hants County Hospital last month, the proposed new block for nurses was discussed. The block, upon which a sum of £3,000 is to be expended, will consist of bicycle, linen, and cloak rooms, a store, sitting-room, sisters' bed-sitting-room, drying-room, and bathroom. The laying of the foundation-stone of the block is to be made the occasion of an interesting function.

NURSES AND THE MOTHERS' UNION.

In the first annual report of the Sub-Committee of the Mothers' Union on the work among nurses it is stated that, after the initial drawing-room meeting at Camelford House in support of the movement, addresses by diocesan speakers on its behalf were given at Guy's Hospital, St. George's, the Westminster, the Samaritan Free, the Orthopaedic, Plaistow Maternity Hospital, and several other institutions; also to district nurses from a number of centres. In every case the nurses have expressed themselves in complete sympathy and willing to do all they could to further the aims and objects of the Mothers' Union. Many from different parts of the country have written offering their co-operation, and one nurse in South Wales distributed over 500 leaflets. Two new branches have been the outcome of the energetic work of nurses, and in one instance the matron and five nurses in a maternity home have become associates; and, as the result of holding regular meetings for three months in the Home, thirty-five former patients have been enrolled as members.

The matron of this Home writes that "the improvement in character and effort in these mothers is very marked."

SCARCITY OF TRAINED MIDWIVES.

LEICESTERSHIRE is suffering from a scarcity of certificated midwives, and the medical officer of health for the county has sent a circular letter to all the local boards of guardians and rural district councils on the subject. The Education Committee of the Leicestershire County Council award scholarships for the training of midwives, and the medical officer of health asks boards of guardians and district councils to supply him with the names of suitable women to take up the work.

NURSES' SOCIAL UNION.

By invitation of Mrs. Daubeney a meeting of the Nurses' Social Union was held at her house in Bath on Friday last. The lecture was given by Mr. Frederick Lace, F.R.C.S., L.R.C.P., on "The Newer Methods of Nursing after an Operation." Miss Eden, central organiser, also spoke to the nurses on the development of the movement. Between sixty and seventy nurses were present. There will be a meeting at Taunton on March 6, and another at Minehead on March 20.

FUND FOR NURSES IN IRELAND.

At a special meeting of the Council of the organisation known as King Edward's Fund for Nurses in Ireland last week the resignation of Miss M. E. MacDonnell, the Secretary, who is going abroad, was announced, and it was decided to make a further grant of £10 to a nurse member who had received a similar amount in 1906, in order to help her over a tedious convalescence after an operation.

CLAIM AND COUNTER-CLAIM.

At the Sussex Winter Assizes last week two cases were heard of alleged slander, the plaintiff in one being a nurse and the defendant a medical man; while in the second action the positions were reversed. Both plaintiffs got a verdict, but the nurse only received a farthing damages, while the medical man was awarded £25, Mr. Justice Bucknill, the Judge, remarking that he entirely agreed with the findings.

WALLINGFORD COTTAGE HOSPITAL.

THE post of matron of Wallingford Cottage Hospital recently became vacant by the resignation of Miss Ashley. But after the vacancy was advertised Miss Ashley withdrew her resignation by consent of the committee, and no change has therefore been made.

SHORT ITEMS.

At a meeting of the Council of the Queen Victoria Jubilee Institute for Nurses on Thursday last week Viscount Goschen was re-elected Chairman of the Council.—An inquest was held last week on the body of Mrs. Anna Sophia Harper, a nurse who, according to the finding of the jury, threw herself over the cliff at Rottingdean during a state of temporary insanity.

The Nursing Outlook.

"From magnanimity, all fears above;
From nobler recompense, above applause,
Which owes to man's short outlook all its charm."

MAKE-BELIEVE IN BRITISH NURSING.

III. THE STAGE ARMY MUST FACE THE FACTS.

WE have shown that the Matrons' Council, though it is only a small, non-representative body, is, in fact, the mother and also the bone and sinew of the International Council of Nurses, of the Society for the State Registration of Nurses, and of the National Council of Nurses, if, indeed, the latter exists. These facts are important and they must be faced by the Stage Army.

We recognise that an International Council of Nurses, organised on a representative basis and embracing the leaders of nursing in all civilised countries, would be a desirable thing in itself and might fulfil many useful purposes. But at present there is no such International Council of Nurses. The few ambitious women, who have taken, or been given that name by the Matrons' Council, cannot claim any representative character. This so-called International Council should, therefore, be speedily ended or mended, if the real interests of the nursing profession are to be the paramount consideration. We are merely upholding the highest interests of the profession and voicing the best British nursing opinion by making these facts plain, for we thus prevent any misapprehension as to the actual present position. It is widely felt to be impossible to permit the creation of an oligarchy in British nursing. The leaders of the present attempt have already proved mischievous by blocking the way to all joint action, to all national courtesy, and to all unity of aim in nursing affairs. All the independent leaders of British Nursing will endorse this opinion. For ourselves, we have nothing to do with individuals as such. It is the principles which matter, for without principles no organisation, for any public or professional purpose, can ever prove successful.

The absurdities of the present position are well illustrated by the paper which calls itself the *Official Organ* in the British Empire, of the Matrons' Council, of the International Council of Nurses, and of the Society for the State Registration of Trained Nurses. This "*Official Organ*," instead of attempting to meet the facts which we have made clear in our two former articles, merely inserts a violent, and, indeed, one might say a vulgar attack, in the course of which the following words occur: "They (i.e., 'Professionally minded nurses'), prefer" this '*Official Organ*' "owned, managed, and edited by trained nurses for the benefit of nurses, and small blame to them."

Amongst the articles which appear in the same issue of the "*Official Organ*" in which this laudatory notice is published is one entitled "*A Lay History of Nursing*," from which the following are extracts:—

"The *American Journal of Nursing* sums up Mrs. Sarah Tooley's History of Nursing in the following pithy paragraph:—

"There are two ways of writing history, one of putting things in, and another by leaving them out. . . . The truth is, the woman who has been the foremost and fearless leader of this movement (i.e., 'association and union among nurses for high purposes') in Great Britain, Mrs. Bedford Fenwick. . . .

"The whole splendid edifice of constructive work in education, organisation, civic activity, practical nursing reforms, training school progress, sound and honourable industrial conditions for nurses, and the development of an intelligent and ethical nursing press, which has been built up with distinguished ability by Mrs. Fenwick," (and four or five other ladies whose names are given) "must necessarily be left unnoticed and unsung."

The review from which the foregoing is an excerpt appears in the Foreign Department of the *American Journal of Nursing*, which is in charge of Miss Lavinia L. Dock. It will be remembered that Miss Dock is an honorary member of the Matrons' Council and also Secretary to the so-called International Council of Nurses, of which Mrs. Bedford Fenwick is either a President or the ruling spirit.

But again, the *American Journal of Nursing* appears also in another place in the same issue of the "*Official Organ*" which "professionally minded nurses" are said to prefer. Thus we read, under the heading of the "Paris Conference," "Mrs. Bedford Fenwick will open the Session at the Paris Conference on Nursing Organisation and the place of Professional Journals therein, and Miss M. E. P. Davis, of Boston, U.S.A., who was the actual promoter, and who took a leading part in founding the *American Journal of Nursing*, will sketch its history."

The uninstructed layman may well ask, "Who is Mrs. Bedford Fenwick whose praises are sounded by the *American Journal of Nursing*, with the promoter of which paper she is to appear at the Paris Conference?" Here, he will say, is a lady to whom the merits of the "*Official Organ*," as described by itself, will indeed appeal, and whom the editor of that paper may well hold up as a model to the "professionally minded nurse"! By turning to the first page of the "*Official Organ*" he will find the information he desires. He will learn—perhaps with surprise—that Mrs. Bedford Fenwick is herself the editor of the very paper (i.e., the "*Official Organ*") from which the above extracts are taken. He will probably reflect that in the circumstances further comment is unnecessary.

The Care and Nursing of the Insane.

By PERCY J. BAILY, M.B., C.M.Edin., Medical Superintendent of Hanwell Asylum.

II.—NURSING THE SICK.

(Continued from page 291.)

3. *Nutrient Enemata*.—Although the mucous membrane of the lower bowel is capable of absorbing fluids, it contains no glands whose secretion has any digestive power. It follows, therefore, that any nourishment administered through this channel must be artificially digested before it is injected into the rectum. This can be readily done by means of various preparations of pancreatic ferment that are on the market, and whose method of use will be explained when we speak of sick-feeding. The bowel is not very tolerant of food, even if it be thoroughly predigested by artificial means, and this kind of enema is, if its use be continued for any length of time, very apt to set up irritation of the mucous membrane of the rectum, and consequent diarrhoea, which cannot be avoided unless by the constant care of the nurse. The absorption of fluids in the rectum is very slow and limited, and therefore the amount given at each injection must be small—as a rule about two ounces is sufficient, and the amount must never exceed three, or at the outside, four ounces. If the rectal feeding is to be continued the smaller amount mentioned should not be exceeded. The interval which elapses between each administration must be at least six hours. This, however, as well as the size and composition of the enema, is a matter which will, of course, be decided by the medical officer in charge of the case. A copious purgative enema of soap and water should always precede the first nutrient one, otherwise there is a risk that the contents of the lower end of the large bowel may be discharged into the rectum, which in health is always empty, as soon as the nutrient enema is injected into it, rendering it impossible for it to be retained. Moreover, when this form of feeding has to be depended upon for many days, as in the cases of ulcer of the stomach with hæmorrhage, for example, the purgative enema should be occasionally repeated, or every second day the bowel may be washed out with $1\frac{1}{2}$ or 2 pints of saline solution (3ij of table salt to one pint of warm water). This is to be administered in the same manner as an ordinary purgative enema, and the patient should be directed to expel it in the course of a few minutes; or the bowel may be washed out before each injection with saline solution or boracic acid lotion in the manner to be afterwards described. All these precautions are necessary in order to prevent the bowel from becoming irritable and rejecting the nourishment at once. For the same purpose also a few drops of laudanum— mv . to xx ., according to instructions, may be added to every third enema. For general use the enema may consist of $1\frac{1}{2}$ oz. milk with one new laid egg, which should be well beaten up before being mixed with the milk. After this has been thoroughly digested, one or two tablespoonfuls of warm brandy or port wine may be added.

The best apparatus to use for injecting the enema consists of the barrel of a two-ounce glass syringe, to which a rubber nasal feeding tube of small calibre is attached. The end of this tube is to be

inserted into the anus for two or three inches, as in the administration of an ordinary enema, the buttocks of a patient being well propped up on pillows; the barrel of the syringe is then to be held up as high as the length of the tube will permit, and the prepared enema poured into it, when it will slowly run through. If the bowel is to be washed out, before such injection as suggested above the apparatus is to be first filled with the saline or boracic acid solution warmed to 95° . As the fluid in the barrel gradually sinks it is lowered until, by the time it is empty, it is level with the patient's buttocks; it is then inserted into a vessel and placed well below the bed, when the fluid will return from the bowel through the apparatus into the vessel. When all the fluid has then run out of the bowel the process may be repeated, or as the fluid gradually sinks more may be poured into the barrel before it is lowered, so as to wash out the rectum with more than the two ounces of fluid which the barrel holds, but not more than 6 ounces (three barrels full) should be used. When the washing out is then completed the nutrient enema is to be given. During the washing out the buttocks of the patient should not be raised. The object of raising the buttocks is that the fluid of the enema may tend to flow away from the anal orifice, and thus diminish the risks of its expulsion. When all the enema has run through the tube is to be gently withdrawn from the anus and the patient told to lie quietly for some time without changing his position.

7. HOT AND COLD APPLICATIONS.

Cold Applications in the shape of compresses or ice-bags are occasionally used where it is desired to diminish the amount of blood in a part, as during the early stages of inflammation. The cold stimulates the involuntary muscular fibres which are found in the walls of the small blood-vessels, and thus diminishes their calibre and the amount of blood passing through them. Cold compresses should consist of three or four layers of flannel or lint wrung out of iced water. These are then applied to the part and covered with a piece of jaconet or gutta-percha tissue. They require to be frequently changed, otherwise they become hot and act as poultices, and are then worse than useless for the effect for which they are ordered. Ice-bags made of india-rubber may be used for the same purpose. The ice should be broken up into small pieces by means of an ice-breaker, or if such a thing is not at hand it can be easily broken by pressing the point of a large needle into it with a thimble. The water which collects in the bag from the melting of the ice must be frequently poured out, and fresh pieces of ice put in to replace that which has thus disappeared.

Hot Applications are either moist or dry. The former include poultices and fomentations or stupes. Hot applications, in whatever form they are used, have an effect on the blood-vessels of the part to which they are applied which is the opposite of that of cold. That is to say, they cause the

smaller arteries to dilate, and thus allow of a greater amount of blood to pass through. In this respect moist applications are very much more efficacious than dry ones, and in addition they tend to soften and relax the tissues and relieve spasm and pain. Whenever a nurse is about to apply any of these remedies she must be careful not to burn the patient. The poultice or fomentation should be tested against her own face before it is placed against the patient's skin. This precaution is doubly necessary when the patient's vitality is much lowered by disease, especially when there is dropsy or any kind of paralysis or other nervous disease where the sensibility of the patient's skin may be diminished. In such patients the heat which an ordinary person could bear with comfort may be sufficient to cause burns and consequent wounds which are very slow to heal.

Poultices.—These may be made of any sort of meal or of starch. There is, however, nothing better than linseed, for this meal contains a considerable amount of oil, and retains the heat better than anything else, and this should always be used unless it cannot be procured. To make a linseed poultice it is necessary to have an ordinary pudding basin and a spoon, together with a piece of muslin, linen, or some tow on which to spread it. Place the spoon in the basin and pour some boiling water into it. Having thus heated the spoon and the basin, pour the water away; then pour into the basin as much boiling water as will be necessary to make the poultice of the required size, and into this with the left hand

sprinkle the linseed meal, stirring vigorously all the time with the spoon. When the mixture has reached the proper consistence—it should not be too firm—and is free from all lumps turn it out into the muslin or tow and spread it evenly and quickly. The mass should be about half an inch thick—if thinner than this it soon loses its heat, and if thicker it is heavy and uncomfortable, and should be spread so as to leave at least an inch of the linen or tow all round the edges. This is then folded in over the poultice, which is now ready to apply to the patient. The poultice should, if possible, be made near the patient so as to avoid having to carry it far; but if it should have to be carried it should be folded over and wrapped in a layer of cotton wadding or placed between two heated plates. When applied it should generally be put next to the skin without any intervening material; if properly made it ought not to stick to the patient's skin; in any case this may be prevented by spreading a teaspoonful of heated olive oil over the poultice as soon as it is made. After the poultice has been placed in position it should be covered with a layer of cotton wool and then tied on with gauze bandages.

A linseed poultice will usually remain hot for three or four hours, and must never be left on the patient for longer than this time. It should always be changed as soon as it becomes cold or uncomfortable. When changed, the new one must be ready to apply before the old one is removed.

(To be continued.)

The Nurses' Clinic.

A CASE OF EMERGENCY.

WORK was heavy and hands were few in a provincial hospital whither I had gone to take temporary duty for three months; in a word we were understaffed. I was at once the night nurse and night sister of the male side of the hospital. Accidents I also had to admit, there being no night porter, and, if necessary, prepare the theatre for operations. There was the usual busy, rapid routine of hospital work, only rather more so than usually falls to the lot of one nurse. I had no time to sit still and think enviously of those who were spending the night in the orthodox way and deplore the anomaly of night nursing. I was, at any rate, spared the subtle, insidious temptation of sleepiness which, in spite of the inevitable cup of tea, will assail the tired night nurse if she has not much to do.

"Nurse, will you get the isolation ward ready at once, please, for a bad case of diphtheria—a boy, seven years old—tracheotomy will be performed in the ward directly he arrives, in about an hour's time, and—will you take the case?"

It was the house surgeon who spoke. I had learnt the discipline of ready obedience to doctors' orders, so I replied in the affirmative, and then asked tentatively how my work was to be done. The best arrangement that could, under the circumstances, be made was made, and my place in the wards was taken by another nurse and I was left free for my new and responsible duty. There is no such thing really as monotony in hospital life, that word should never find a place in a nurse's vocabulary; it savours of lack of imagination and sympathy on her part, who would do well to remember that what is an "interesting case" to her, spells something very different to the object of her interest. Nevertheless an emergency case is the trained nurse's oppor-

tunity, and must not be discounted. But this in parenthesis. To get the fire lit, bed made, tent erected, kettle half-filled with boiling water, and put in motion, and to make, other preparations necessary for the operation, and for the nursing of such a case, did not take very long.

One glance at the poor little sufferer, who was brought in by his mother, convinced me that it was a very bad case; the child was in *extremis*, semi-suffocated by the cruel disease so often characterised by the appearance of membrane, of a more or less glutinous nature, which attacks and adheres to the throat and nasal passages. Fortunately the patient's arrival was soon followed by that of the operating surgeon and, all being in readiness, the operation was performed at once. The immediate result of the incision into the trachea was a rush of confined air, and with it a splutter of mucus, which I, standing too near, received into my face—carelessness for which I deserved no pity. The relief was instantaneous, and the look of strain and suffering on the little face was replaced by one of comparative comfort and ease. However, Johnny was in a critical condition, and I watched him anxiously for 18 hours, keeping the tube clear and giving constant nourishment, disinfecting and cleansing the throat, etc.

For that and the two following nights he did fairly well; in fact, speaking in the comparative degree, he did very well, and so I believed and hoped he would weather the storm, for he had that which is such a valuable asset in times of sickness—youth and strength. On the third night, or fourth—I cannot clearly remember which—all went well for the first few hours, his breathing and his strength well maintained. Suddenly, without any warning at all, there

THE NURSES' CLINIC.—*Continued.*

appeared to be an interruption in the breathing of a very serious nature, and poor little Johnny was threatened with suffocation, due, I rightly guessed, to a piece of membranous matter having become dislodged from the lung, and blocking the tracheal passage beyond the reach of the tube. As long as I live I shall never forget that poor child's face; it was transfigured, his eyes, big with terror, were turned to me in agonised mute appeal, while he clenched his fists and kicked out his legs with the force of impotent frenzy. It was obvious that removing the tube would be of no avail, the tube was clear. For a moment my own helplessness was borne upon my mind with sickening dread. Must I watch the poor little fellow die!

My own agony of mind was as great as his physical distress. There was only one thing to be done, and if that failed, nothing could save the child—artificial respiration. I seized the arms and brought them above the head; in bringing them down to the sides I pressed with force against the ribs, to force the obstruction upwards if possible.

Hearing a nurse pass the door outside, I told her to call up the house surgeon immediately; he appeared almost at once.

"I can do nothing more than what you are doing, nurse," he said, and unwilling, I suppose, to watch what seemed to be inevitable, he, half-reluctantly, left the ward. Time cannot be measured in such supreme moments of life—it materialises itself to the overwrought brain, and merges into tangible torture.

Obviously, and as a matter of fact, no length of time can elapse in a case like this, so it must have been very shortly after the house surgeon left the ward that the child became slightly easier; soon he began to cough, and as he did so I

caught sight of something appearing at the mouth of the tube, and was just about to seize it with a pair of forceps, holding my own breath in the extremity of my suspense, when, with inhalation, it disappeared down the tube again. However, the worst was over, the boy coughed, and his breath. I waited patiently with forceps in hand, watching the tube, as it really was a bit wobbly, as it were, and I have no doubt with a wildly beating heart. Another cough and I had caught the thing, the dead thing that had so nearly cost my little patient his life. A huge, yellowish piece of dead membrane, about as large as the end of my finger, the largest piece I had ever seen. No sooner had the obstruction been coughed up, than the child opened his eyes, breathed easily, and I put away all the apparatus that had recently cost him his life. I looked at the sleeping boy, and then at the thing I held in the forceps, and my eyes filled with tears. I saw a ray of light, the tension of my brain relaxed, and I had felt that my chance to save the child's life had now been given. I put it in a bottle containing methylated spirit. I held it up to the light, and looked at it again, with an almost incredulous feeling. It was in the right place now, not on the wrong side, making all the difference. Now it was a matter of degrees of interest. I looked at it with the keenest interest, almost with affection, for had it not negatively saved my dear little patient's life?

The house surgeon, who had not gone back to bed, returned just at the moment of my triumph; he was surprised to find the child sleeping and breathing normally, his extremity past, and no trace of it left on his features. I held the little bottle up to him with a smile on my face. He understood, gave an answering smile, and returned to bed. Easy respiration was established after that, and there was no recurrence of the impediment.

Incidents in a Nurse's Life.

MY FIRST MATERNITY PATIENT.

I WAS studying for my midwifery certificate—it was before the days of the Central Midwives Board—but before I could go to the hospital I had to attend a certain number of cases with a midwife or doctor. A friend of ours, a doctor living very near, said I should attend some cases with him. Accordingly a few days later he sent me to a case, arriving himself a few minutes afterwards.

I was only twenty-two and very nervous, but everything went off well, though I saw very little, as I kept on the other side of the room except when wanted by the doctor. The next week the doctor sent again to tell me to go to a certain address. I went and found a big buxom woman walking about and apparently in the first stage of labour. The doctor arrived shortly afterwards, and in a few minutes he said to me, "Well, nurse, she will be some hours yet" (this was about 10 A.M.), "I will go and see some of my patients and come back about noon." I felt quite a shiver run through me at the thought of being left alone, so I followed the doctor downstairs and begged of him not to be long. "Oh," he said, laughingly, "I shall be back long before you want me," so I returned to the bedroom and proceeded with my preparations and kept chatting with my patient. However, shortly I noticed that her pains were becoming stronger and at shorter intervals, and I began to feel increasingly nervous, and went to the window to see if I could see anything of the doctor's carriage, but there were no signs of him. At last the patient said, "I

suppose you will be able to manage, nurse, if it comes before the doctor arrives?" My heart jumped into my mouth at this, but I said as bravely as possible, "Oh, yes," but it was a good thing she could not see my face. I went to the window again, and heartily wished I could jump through and run away. All at once the patient said, "Oh, nurse, I am sure it is coming." I went to her and found the head just emerging, and in two minutes a fine boy was born. I was trembling in every limb, and as to severing the cord I felt sure that the baby would bleed to death, or something awful would happen. But there was nothing to do but to go ahead, so I tied the two ligatures as well as I could, severed the cord, and rolled the kicking, bawling baby up in the receiver and put him in a place of safety. The third stage came off as easily as the rest had done, to my great relief. I then bound up the mother and made her comfortable. I bathed the baby and put him in bed with the mother. Presently I heard the sound of carriage-wheels, and then the doctor came striding up the stairs. "Well nurse," he said, "how are things by this?" "All right, doctor," I replied, he went to the bedside and the patient said, smilingly, "Well, you're a nice man, coming when all is over; look here," and she turned back the clothes to show him the baby, tugging away at the breast. The doctor did indeed look astonished, and smiled amusedly at me.

I told the mother all about it about two years afterwards when I was attending her again, and she is never tired of telling people that "their Tommy was Nurse G.'s first baby."

Illustrations of the Life of a Modern Nurse

LIFE IN A GENERAL HOSPITAL.



OFF DUTY AT THE LONDON HOSPITAL.

IN THE GARDEN OF EDEN, LONDON.

Central Midwives Board.—February Examination.

COMPLETE LIST OF SUCCESSFUL CANDIDATES.

THE number of candidates who presented themselves at the examination of the Central Midwives Board, on February 12, was 389, and of these 291 passed, the percentage of failures being 25.2. The following were the successful candidates :

Jane Bell, Janet Christiana Blomfield, Grace Edith Blott, Minnie Elsie Clark, Louise Mary Counsell, Lucy Dobson, Alice Kathleen Fenn, Rose Ethel Johnstone, Liza Irwin, Beatrice Llewellyn Margrave, Victoria Melicent Moore, Emma Polden Parks, Minnie Randell, Louisa Septima Robson, Charlotte Ann Tweedy, and Winifred Julia Woodforde, were trained at Queen Charlotte's Hospital.

Selina Amelia Adams, Mary Andrews, Carrie Caffin, Elizabeth Winifred Eady, Marion Gratton, Evelyn Hastie, Jessie Judge, Emilie Sarah Lawrence, Annie Lewis, Grace Anna Josephine Lloyd, Katharine Vincent Lloyd, Neta Winifred Mackintosh, Olive Matthews, Lilian Helen Harrington O'Reilly, Amy Jane Pilton, Alice Muriel Ragg, Dorothy Rose Roberts, Rose Isabella Shephard, Edith Letitia Stephens, Emma Eliza Stiff, Frances Ellen Stillwell, Gertrude Ada Taylor, May Louisa Trenery, Daisy Maud Cottingham Wadling, Alice Wall, and Alice Maud Whitehead, at the General Lying-in Hospital.

Margaret Dorothea Palmer, at the City of London Lying-in Hospital.

Mary Archer Briggs, Jessie Crerar, Emily Alice Dibblin, Hilda Marjorie Edmonds, Emily Kezia Marle, Florence Victoria Earish Munson, and Alice Oliver, at Guy's Institution.

Gertrude Fanny Burnell, Alice Maud Elliot, Charlotte Sarah Elsey, Charlotte Elizabeth Ann Glossop, Mary Jane Houlton, Rose Anne Lloyd, Frances Drummond McGregor, Isabella Margaret Louisa Mannars, Grace Anne Payne, Ada Mary Smith, and Mary Isabel Wigham, at the London Hospital.

Ellen Beadon, Catherine Bone, Caroline Eliza Green, Catherine Hester Harper, Amelia Blamey Northcott, Hélène Ullmann, and Constance Watney, at the Clapham Maternity Hospital.

Anne Sylvia Parker and Helen Edith Augusta Tottenham, at the New Hospital for Women.

Alice Barter Barter, Elizabeth Besgrove, Agnes Olive Blacklocks, Elaine Margaret Brewin, Rosa Bullock, Ella Ermyntude Dixon, Charlotte Evans, Mary Jane Giddings, Helen Elizabeth Grahame, Margaret Gray, Mary Ann Grier, Laura Beatrice Gumbrell, Mary Harriet Helen Hill, Ellen Kneebone; Annie Macqueen, Annie Mary Meagrove, Martha Meredith, Millicent Rose Page, Elizabeth Pick, Minnie Pope, Margaret Annie Smith, Lizzie Taylor, Charlotte Turnbull, and Esther Elizabeth Welch, at the Maternity Charity, Plaistow.

Ethel Margaret Collins, Jane Edith Highet, Clara Reeve, and Olive May Pounds, at the East End Mothers' Home.

Emily Gooch, Lizzie Parker, Martha Elizabeth Pollexfen, Mary Elizabeth Wilkinson, and Ethel Womald, at the Salvation Army Maternity Hospital.

Margaret Hannah Hassell and Annie Paterson Wilson, at the Military Families' Hospital, Cheltenham.

Harriot Evans, at the Military Families' Hospital, Woolwich.

Nettie Blackburn, Dora Eliza Trinder, and Hannah Josephine Nolan, at the Shoreditch Union Infirmary.

Catherine Selina Selwood, at the Lambeth Infirmary.

Annie Elsie Vickery, at the Kensington Union Infirmary.

Eva Harriet Baker, Gertrude Olive Chadwick, Emily

Winifred Connah, Emmie Dowling, Mary Matilda Griffiths, Louisa Ellen Haynes, Catherine Emily Lee, Florence Gertrude McFall, Isabella Parker, Margaret Potts, Harriette Alice Read, Agnes Rigby, Florence Lilian Sturman, and Alice Thompson, at the Liverpool Lying-in Hospital.

Teresa Maud Mary Walton and Violet Helen Wilson, at the Walton Workhouse, Liverpool.

Florence Wilhelmina Atkinson, Florence Gertrude Brown, Bertha Davies, Matilda Easterbrook, and Margaret Halliday Roddan, at the Liverpool Workhouse Hospital.

Caroline Catharine Böcker, Anna Hill, Adelaide House, Lily Annie Lawrence, Emily Louisa Parselle, Emily Jane Stephens, Alice Kate Waldrew, and Agnes Marguerite Wylie, at the Bristol Royal Infirmary.

Edith Marion Gauntlett, Constance Muriel Newton, Edith Ellen Perry, and Rena Emily Smith, at the Bristol General Hospital.

Annie Florence Angus, Dora Dransfield, Elizabeth McRae, and Frances Mary Pilkington, at the Jessop Hospital, Sheffield.

Sarah Janet Dockery and Lillie Cornelia Essen Edworthy, at the Nottingham Workhouse Infirmary.

Selina Harborough, Annie Louise Hawkins, Rebecca Ann Henry, Edith Isabella Hinde, Helen Thompson Husband, Muriel Florence Neison, Bessie Florence Potter, and Annie Smith, at the Brighton and Hove Hospital for Women.

Rachel Theodora Chatfield Croll-Dalgairns, at the Birmingham Workhouse Infirmary.

Harriett Cooke, Ellen Martin, and Lilian Maggie Routledge, at the Birkenhead Maternity Hospital.

Isabella Dawson Benoy, Mary Ann Phillips, Laura Watson, and Mary Emily Sarah Young, at the Royal Derbyshire Nursing Association.

Hannah Fisher, Sarah Alice Ramsden, Mary Alice Pembroke, and Edith Mary Ward, at St. Mary's Hospital, Manchester.

Anna Biggs, Mary Graham, Anne Atkinson Hall, Marianne Sapcote Morrison, and Alice Robinson, at the Newcastle-on-Tyne Lying-in Hospital.

Jeannie Mulholland Adams, Margaret Conlon, Margaret Ann Dawson, Mary Matilda Knox, Madeline Naylor, Sarah Patton, Annie Margaret Rankin, and Mary Emily Walker, at the Belfast Union Maternity Hospital.

Bertha Susanna Collins, Maria Lassini Goodson, Ada Griffiths, and Elizabeth Monro, at the Queen Victoria Jubilee Institute for Nurses, Cardiff.

Mary Christabel Danson, at the Aberdeen Maternity Hospital.

Margaret Proctor Dawbarn, at the Hall Lying-in Charity.

Hélène Marie Doderet, Margaret Hawthorn, and Agnes Elizabeth Snowden, at the Louise Margaret Hospital.

Anne Dunn, trained at the Rotunda Hospital, Dublin.

Margaret Watson Eadie, Isabella Carr Ellwood, Sarah Elizabeth Lee, Mary Seater, Margaret Slattery, Violet Teale, Margaret Leslie Winchester, and Mary Winifred Youl at the Glasgow Maternity Hospital.

Thomasine Jane Eustice and Charlotte Elizabeth Lindsey, trained by the Gloucester District Nursing Society.

Amy Jane Felton, Mary James, Elizabeth Ann Paul, and Margaret Williams, at the Newport and Monmouthshire Hospital.

Kate Fern at the Greenwich Union Infirmary.

Janet Fraser and Mary Ellen Swindells, at the Dundee Maternity Hospital.

Lilian Keen Henshaw, Lucretia Hill, and Isabella Callow Stanbury, by the Cheltenham District Nursing Association. Effie Ann James, Ethel Violet Lovell, and Eleanor Pridgeon, at the Cardiff Union Infirmary.

Edith Emily Smith, at the Coombe Lying-in Hospital, Dublin.

Winifred Frances Ingram, Mary Ann Lloyd, and Constance Emily Pracy, by the "Regions Beyond" Missionary Union.

Flora Susannah Smith, at the Ipswich Nurses' Home.

Adela Isabella Bode Austin, Elizabeth Annie Beattie, Mary Brennan, Winifred Alice Brierley, Mary Bright, Annie Budd, Kate Bune, Florence Annie Clift, Florence Cooper, Henrietta Sinclair Crawford, Jessie Frances Davenport, Elizabeth Kate Davies, Ellen Davies, Lilian Constance Duncan, Ethel Florence Farrow, Mary Bird Galloway, Sarah Gottman, Florence Mary Vansittart Graves, Emmeline Hackward, Mary Haldane, Nellie Higgins, Grace Margaret Hooper, Mary Ann Hosington, Charlotte Ann Houghton, Lilla May Howarth, Annie Jackson, Cecilia Marion Jackson, Naomi James, Elizabeth Martha Rose Johnson, Isabella Graham Johnson, Annie Helen Hamilton Jones, Catharine Jane Jones, Cecilia Evelyn Jones, Elizabeth McClymont, Clara Maylott, Mabel Willis Meachin, Mary Eveline Moore, Gertrude Amy Morley, Mary Hannah Muschamp, Harriet Elizabeth Olorenshaw, Edith Outram, Annie Catherine Owens, Mary Parker, Alice Mary Patchett, Violetta Ramsden, Emily Nora Ranger-Parton, Anne Reid, Jane Roberts, Janet Ewart St. Clair, Ellen Florence Sanders, Elsie Marie Schade, Sarah Scrimgeour, Beatrice Constance Mary Smith, Eleanor Stanton, Louisa Ellen Steadman, Lottie Swallow, Martina Taylor, Maria Payne Townsend, Alice Turner, Mary Watkins, Maria Antoinette White, Ella Widdows, Catherine Ann Wilson, Dora Elizabeth Wood, and Elizabeth Catherine Woods were trained by private individuals.

Presentation to Miss Ramsden.

On the occasion of her retirement from St. Marylebone Infirmary, Miss Ramsden was last week presented with a handsome pair of massive silver candlesticks and a silver compôte dish, bearing an appropriate inscription, by the medical and nursing staff of the infirmary.

Presentations were also made to her of an album containing all the names of the staff and the medical superintendent; a cut-glass claret jug, with silver top and handle, from the domestic staff; a silver bag-purse, from the resident medical officers; and a Russia leather card-case, from one of her late nurses now in Rome.

On the day previous to her departure last week a large number of nurses gathered together in the hall of her house and sang, in token of their esteem and affection, the hymn, "God be with you till we meet again."

It is with the deepest regret that the nursing staff of St. Marylebone Infirmary have said farewell to their dearly loved matron, and her place in their hearts will not easily be filled.

Miss Ramsden made each member of her staff, from the highest to the lowest, feel that she was not only their matron, but their friend, and it was as such that her nurses loved her and realised how much they have lost by her resignation.

She takes with her their best wishes for the future, and the hope that she may be rewarded somewhat for her labours among them by the knowledge that many young lives have been helped and encouraged at the beginning of their nursing career by her kindly interest and sympathy.

Miss Ramsden, who is now staying in Yorkshire, desires through our columns to thank her present and past nurses for their kind expression of sympathy for her on her retirement; and also all her hospital friends and nurses for the kind letters which she has received from them, all of which she has not yet been able to answer personally.

Association for Promoting the Training and Supply of Midwives.

THE third annual meeting of the Association for Promoting the Training and Supply of Midwives was held on February 21 at 2 Cromwell Houses. Dr. Cullingworth was in the chair; and Mrs. Wallace Bruce gave the meeting a general outline of the report.

The report states that 551 applications for training have been received during the year, as against 433 in 1905. Of these 12 have been trained, as against 25 in the previous year. This reduction is partly due to want of funds; vacancies in the training schools have to be secured some months in advance, and the Council regret that several good candidates were lost owing to lack of funds and being unable to hold out hope of their being trained within a reasonable time. All the pupils were successful in passing the C.M.B. examination. The committee has been asked by the Nursing Associations of Shropshire, Somersetshire, and Gloucester to train women for work in those counties, in some cases sending up the pupils and paying towards their training. The Northamptonshire County Council has granted two annual scholarships for midwives, and the Association is to undertake the training of the women. Thirty-seven midwives who had been trained by the Association were now at work in different parts of the country, and all were reported to be doing excellent work.

The work at the Home continues to increase, the number of births attended this year being 864, as against 630 last year. The number of visits paid were 15,892 in 1906 and 12,283 in 1905. Mrs. Wallace Bruce and Miss Lucy Robinson both testified to the high standard both of training and moral influence which Nurse Rabson, the chief midwife, maintains, and to whom the success of the Home is largely due.

With the object of keeping in touch with the midwives, the Association has instituted a plan of giving a badge to those who have completed six months' satisfactory work in their districts.

An Advisory Committee has lately been formed, of which Mr. T. Almond Hind has consented to act as Chairman. Among the members of this committee are Dr. Champneys, Dr. Cullingworth, Miss Gibson, Miss Gill, Sir Shirley Murphy, Miss Paget, Miss Wilson, and many others, including several county medical officers. The committee is to inquire into and consider the whole question of the supply of midwives necessary to meet the requirements of the Act in 1910. According to statistics issued by the Central Midwives Board, there are 12,255 midwives practising in England and Wales, of whom 8,115 are untrained and enrolled under the *bona fide* clause of the Act. It is easily seen therefore the enormous deficit there will be in 1910, when these women "go out"—a serious question both to poor mothers and to Poor-law authorities, upon whom heavy expenses of medical attendance will fall unless measures are taken to fill up the gap.

Mr. Theodore Dodd spoke of the responsibilities of Boards of Guardians in the matter of relieving mothers and infants, and among other speakers were Mrs. Chas. Ebdon, Miss Grant, and Mr. Leon.

Queen Victoria's Jubilee Institute for Nurses.

MISS LUCRETIA HILL has been appointed to Cheltenham, Miss Rosa Lambert to Rawtenstall, and Miss C. E. Lindsey to Little Shelford; Miss Lillie Steele temporarily to Guildford, Miss Imelda Tegarty temporarily to Withington, and Miss E. N. Epps temporarily to Winslow. Miss E. C. Birch has been transferred to Matlock from the Liverpool Central Home.

Nurses' Radius Agreements.

At Bournemouth last week a masseuse and nurse brought an action against the matron of the Dowsing Electrical Institute in that town for the sum of £6 15s. 8d., representing damages for an alleged breach of contract. Through the agency of an institution known as the Tabitha Training Nurses' Association the nurse had been engaged at the institute at a salary of £25 a year and a further sum of 15s. a week as remuneration for pupils and for attending to out-patients. It was also agreed that the nurse was to receive her fare from London to Bournemouth, and her return fare if she remained more than three months. She was told that she would be required to sign an agreement. A short time after her arrival on December 2 she was asked to sign an agreement that she would not carry on business nor act as a nurse within a radius of twenty miles of Bournemouth. With regard to acting as an electrical nurse, she was quite willing to sign this agreement, but refused to do so as to a general nurse. Ultimately she declined to sign the agreement at all, and left on December 22. The judge expressed his opinion that the agreement which the plaintiff was asked to sign went beyond the arrangement suggested at the time of her engagement, and he gave judgment for the nurse for the salary claimed, for the return fare from London to Bournemouth, and a certain sum for instruction to pupils and assistance to out-patients—namely, £5 0s. 8d. in all, together with the costs in the action.

Appointments.

COVENTRY AND WARWICKSHIRE HOSPITAL, COVENTRY.—Miss Amy Lander has been appointed night Sister. She was trained at the Royal Infirmary, Preston, where she was afterwards theatre charge nurse. She has since been Sister at the Royal Isle of Wight Infirmary and County Hospital, Ryde, and Sister at the Stockport Infirmary.

GRESSENHALL INFIRMARY, NORFOLK.—Miss Nellie May Hitchcock has been appointed superintendent nurse. She was trained at Epsom Infirmary, and has since been staff nurse at Christchurch Infirmary and charge nurse at Epsom Infirmary. She holds the certificate of the Central Midwives Board.

HARTLEPOOL INFECTIOUS DISEASES HOSPITAL.—Miss Edith Dawson has been appointed charge nurse. She was trained at the London Fever Hospital, and has since been staff nurse at the Isolation Hospital, Warrington, temporary nurse at Rothwell, Methley, and Hunslet Joint Isolation Hospital, and senior charge nurse at the Isolation Hospital, Burnham.

HAYWARDS HEATH COTTAGE HOSPITAL.—Miss Lois E. Hulme has been appointed staff nurse. She was trained at Croydon Infirmary, and has been midwife at Plaistow Maternity and District Nursing Association.

PRINCESS ALICE MEMORIAL HOSPITAL, EASTBOURNE.—Miss Florence Perkins has been appointed senior Sister and Miss Katherine Boyle night Sister. Miss Perkins was trained at Mill Road Infirmary, Liverpool, where she has since held the post of Sister of wards for three years. Miss K. Boyle was trained at Mill Road Infirmary, Liverpool, where she has since held the post of Sister of a large medical ward.

ROYAL BATH HOSPITAL, HARROGATE.—Miss A. Paffy has been appointed staff nurse. She was trained at the Salford Union Infirmary, Pendleton, Manchester.

SPITLSESA INFECTIOUS HOSPITAL, LUTON.—Miss Olive Mallett has been appointed staff nurse. She was trained at the Isolation Hospital, Dartford, and has since been nurse at the Isolation Hospital, Amphyll.

Death in our Ranks.

ON Friday last, at the Royal Devon and Exeter Hospital, Sister Summerhayes (Miss Linda Chegwidden) passed away after suffering for several months from a painful malady. The funeral took place at Newquay on Wednesday this week, and simultaneously a memorial service arranged by the Chaplain was held in the hospital chapel.

Everybody's Opinion.

A PROBATIONER LOSES HER SIGHT.

"NURSE M.," Southend, writes: Will you please give the enclosed order for three shillings to the nurse who recently lost her eyesight while attending to a typhoid patient at West Ham Infirmary. She has my deepest sympathy.

SUICIDE OF A PROBATIONER.

"D. Z. B." writes: Referring to the pathetic and interesting letter of Mr. Roberts in last week's issue as to the death of his niece, in which he appears very rightly and indignantly to deny that she poisoned herself, and further asserts that she could have had no reason for doing so, I would venture, if you have space, to say that not so very long ago, in a hospital that I think, for obvious reasons, I had better not name, a young lady whom I knew very well poisoned herself for no other reason than that she had been rather severely reproved by the matron. It is true that the girl I refer to had rather a violent temper, and could not bear being reproved in any way; but, in spite of her being in a properly conducted hospital, and herself a very young and inexperienced nurse, she certainly contrived to put an end to her life very successfully. I am the very last person to defend suicide, but I humbly venture to think that it is not always the unpardonable crime that society thinks it to be.

THE DISTRICT NURSE AND THE PARISH DOCTOR.

"KENTISH NURSE" writes: I can sympathise with "E. W." When I was working in Surrey I contracted typhoid fever. I sent twice for the doctor, waiting three days for him. The vicar was manager, and so his doctor was advised, but as he had a journey of six miles to make to get to me I frequently did not get necessary attention. During my work in my present district I had hamatemesis. I asked two doctors' advice some time before, as I was in great pain, temperature 96°, pulse 50, and each doctor told me that many people have a subnormal temperature, and that there was nothing to be alarmed about; consequently I went on until I collapsed. The parish doctor being away on his holidays, I could not consult him; he is most kind, but his *locum* attended me until his return. In all, three doctors were telephoned for, but each answer was "Not at home," although the time of sending was 8 to 9 a.m. It was midday before I could get one. A doctor who has attended a nurse friend says he will not attend nurses gratis, and sent in the bill. If doctors do not care to attend district nurses, why do they not say so, instead of leaving us unattended? I think the best plan "E. W." can follow is to change her district. The nurse in the next parish to mine is working under the same difficulties, consequently she is retiring. I fail to see where the wrong comes in. Why should a nurse have a doctor she does not care for? She should be as free to choose as other individuals.

Novelties for Nurses.

(BY OUR SHOPPING CORRESPONDENT.)

THE "SPINALIFE" BRUSH.

THIS is a useful and handy piece of apparatus, made by the Spinalife Brush Company, Carlton House, 11 Regent Street, S.W., and sold at 12s. 6d. The brush itself, of hog bristles stoutly inserted on a wire frame, will stand a good deal of rough usage, and as it is of simple construction it is unlikely to give trouble by getting out of order. Its uses are manifold. Thus it will prove of service in cases where skin-friction is essential, after the cold bath, etc., and it should be a valuable adjunct to the armamentarium of the masseuse. For self-use its usefulness will be increased by curving, or at any rate lengthening, the handle. As at present made the straight handle prevents the user from obtaining the maximum pressure when employing the brush for friction purposes.

The Hospital

A JOURNAL OF

The Medical Sciences and Hospital Administration.

NEW SERIES. No. 2, VOL. I. [No. 1074, VOL. XLII.]

SATURDAY, APRIL 13, 1907.

A MODERN MEDICAL JOURNAL.

Would it fulfil any useful purpose to provide the medical profession with a modern medical journal? We believe it would, for the following reasons, amongst others. This is a busy age, which entails upon the individual worker the necessity to secure every facility which will economise time, whilst it supplies the necessary information and facilities for the acquirement of knowledge. The busy practitioner cannot devote a large amount of time to study, but he needs facilities to keep himself in touch with all that is going on in the medical world, and especially in the direction of the diagnosis and treatment of disease in all its aspects. The general practitioner has no doubt grievously felt the competition of the hospitals in recent years. Such competition would at once become relatively unimportant, if the practitioner who holds no hospital appointment could readily keep in touch with every new development. He would then be in a position to bring himself up to date by availing himself to the fullest extent of modern methods in all directions. The modern medical journal should be capable of supplying these wants of the practitioner upon a plan which should give him every facility for information, whilst it enables him to avail himself to the fullest extent of everything calculated to add to his knowledge.

It will be seen from an announcement which appears in to-day's Special Supplement, and which we hope everyone will read, that THE HOSPITAL, after nearly twenty-one years of successful work, proposes to make a new departure, which will constitute it the modern medical journal. In its new form THE HOSPITAL will include every section of hospital work. The object of the editors will be to supply an ably written, informative, readable, and practical medical journal, which will never contain more than thirty-two pages of literary matter, whilst it will be printed in long primer type, so as to form comfortable reading for the practitioner in his carriage, without the bulk and weight which are

unavoidable in the case of a journal of from one hundred and fifty to two hundred pages. It may be felt that it may not be possible to cover all the ground or to include everything we desire to compass in the space to which we propose to limit ourselves. That it is possible, by the exercise of careful editing and clear writing to accomplish all this, will, we hope, be manifest by the contents of our present issue. The whole staff are thoroughly united and interested in the problem they have set themselves to solve. We have therefore full confidence, that, our readers will find, that the promise with which we have commenced this new series of THE HOSPITAL, will be more than fulfilled, before the year is out.

We are most anxious to secure the co-operation of the general body of the profession in this attempt to meet a want which we are assured they have long felt. It will be seen on reference to the last page of the present issue that we have specially set aside space for clinical communications from general practitioners, and that everybody who wishes to have an opening for the prompt publication of valuable monographs, based on clinical experience, will find it in the columns of THE HOSPITAL. Every contribution which is accepted for these sections will be paid for, the editors' wish being to make the new series of THE HOSPITAL of practical interest and value to every practitioner, whatever may be the conditions of his practice and surroundings. Finally it is hoped that the fact that there will be no increase in the price of THE HOSPITAL, and that it will be supplied to all subscribers, post free, for an inclusive payment of 13s. per annum in the United Kingdom, or of 17s. per annum in the colonies and abroad, will cause the enterprise thus displayed to appeal to the profession throughout the Empire. We cordially invite suggestions from every quarter, and pledge ourselves, in advance, to use every endeavour to meet the requirements of each branch of the profession to the fullest possible extent.

MEDICAL PRACTICE AND THE COMPANIES ACT.

It seems at first sight the statement of an absurd proposition, to say that an act which is illegal for any one individual, may be perfectly within the compass of the law if only it is performed by seven individuals acting in association. Yet such, it would appear, is the exact position in reference to the adoption of titles commonly employed to indicate the possession of a registrable medical or surgical qualification. Such titles, the legislature has decreed, may not be assumed except by those who have satisfied certain conditions in reference to education, examination, and registration. Any person who, not having satisfied these conditions, falsely assumes a designation which implies that he is a legally qualified medical practitioner, breaks the law, and may therefore be visited by appropriate penalties. The term "person," however, takes on a technical meaning when the construction of an Act of Parliament engages the attention of the judicature, and thus, legally, a joint stock company, which to the plain man is merely a number of persons, is not, in the eye of the law, itself a "person." Its legal position is that of a "corporate body," and prohibitions which apply to individuals do not affect it. A company, proverbially, has neither soul that may be saved nor anatomy that may be kicked. In addition, as has now become evident, it may profess itself to be something which no one of its constituents either is, or can legally claim to be. For A, not having fulfilled the legal conditions, to adopt or use such a title as physician or surgeon means the risk of a visit to a police magistrate. But if wise in his generation, A first seeks out six other spirits like unto himself, and then, having formed a joint stock company, announces the combination as "A, B and C Co., Limited, Physicians and Surgeons," there is no one to say him nay, or to question in any degree the strictly legal character of his proceedings.

What is true, as stated above, of the profession and practice of medicine by joint stock companies, is true also of dental practice and of the business of a chemist and druggist. "Medical practitioner," "dentist," "chemist and druggist," all are titles obtained under conditions prescribed by the legislature, and their assumption by unqualified persons carries legal penalties. Yet any one, or all of them, may be adopted by a joint stock company, though not one single member of the company could take this step in his individual capacity. The joint stock company is not a "person," and the legal restraints against "persons" do not apply to it. In this respect it is probable that medical practice and dental

practice are even in a worse position than the business of pharmacy. A joint stock company carrying on the business of a chemist and druggist is compelled to employ in each of its shops a person qualified under the Pharmacy Acts, because it has been decided, after a stubborn legal contest, that the "seller" of a poison, is not the person who owns the shop in which the sale takes place, but the individual who hands the goods across the counter. Hence the sale of any statutory poison, or the profession of a legal qualification to carry on the business of a chemist and druggist, does demand the existence and action of an individual qualified under the Pharmacy Acts, even when such business is nominally conducted by a joint stock company. But it may be doubted whether any parallel necessity exists in connection with the practice of medicine. There is no law in this country to prevent anyone from practising medicine and surgery; all that is demanded is that no person shall falsely assume titles which imply the possession of a legal qualification. Hence, apparently, there is nothing to prevent "X, Y, Z Co., Limited, Physicians and Surgeons," from conducting a medical and surgical practice by their own unlicensed hands or by the hands of any other unqualified persons. And, to carry the absurdity a stage further, it is even possible, under the existing law, for a medical practitioner whose name has been erased from the medical register to form a company for the express purpose of securing a style and title the same, nominally, as those of which he has been officially deprived.

Commercial enterprise has already taken advantage of the Companies Act to invade both the art of pharmacy and the practice of dentistry, and it is said that similar methods are in progress in reference to the practice of medicine. In these circumstances it is high time for the legislature to interfere on behalf of honest citizens, and for the protection, more especially, of the poorer members of the community. We are glad, therefore, to note that, on the initiative of Lord Hylton, a Bill has been introduced into the House of Lords for the purpose of making it unlawful for a company formed under the Companies Act to practice as, or carry on the business or profession of, a physician, surgeon, or medical practitioner; and providing a substantial penalty for any "company, director, manager, or other officer" who contravenes this enactment. In short, the object of the Act is to prevent any person doing under the cover of a company what it is at present illegal for him to do as an individual. A similar Act proposes to deal in the same fashion with dental companies, and the Pharmaceutical Society hopes to persuade the legislature to adopt the same attitude toward "company chemists." All these proposals are in the public interest, and merit the hearty support of the medical profession.

ANNOTATIONS.

A Notable Character.

MR. THOMAS HENRY WAKLEY, F.R.C.S., who died on the 5th instant in his 87th year, had been joint editor of the *Lancet* with his son, Mr. Thomas Wakley, Jun., since 1886. Mr. Wakley qualified nearly sixty years ago, and his active surgical work, as demonstrator to the late Sir Erasmus Wilson and as surgeon to the Royal Free Hospital, though belonging to a previous generation, brought him reputation and a large practice. On his father's death in 1862, the late Dr. James Wakley became editor, and Mr. Wakley manager of the *Lancet*. On the death of the former Mr. Wakley succeeded to the editorship. Having known Mr. Wakley for nearly forty years, and having been associated with him in journalism and in public work, the present writer can testify to his unostentatious but great liberality, to his amiable personality, and to his invariable desire to achieve results with the utmost possible consideration for the feelings and rights of other people. It is only a few months ago, in connection with a rather troublesome business affair, that Mr. Wakley displayed these admirable qualities and so contributed to the quiet settlement of a matter, which might otherwise have given rise to friction and difficulty. Mr. Wakley was one of the oldest and most respected members of the Council of the Metropolitan Hospital Sunday Fund, which became a metropolitan institution mainly through the influence of the *Lancet* and the persistent and continuous efforts of the late Dr. J. and Mr. Wakley. Though in no sense a public character, he had a host of friends who valued the qualities which so markedly characterised the man, and made him, often, a power for good in matters of importance. We offer our sincerest sympathy to Mrs. Wakley, and to Mr. Thomas Wakley also, who has shown such marked ability in the editorial chair of the *Lancet*, which is the oldest and probably the most influential medical journal in the world.

Beri-Beri and Oxalic Acid Poisoning.

EISENMANN was the first to observe that by feeding fowls on rice they contracted a disease which closely resembled human beri-beri in its clinical features. Dyspnoea, cyanosis of the comb, and paralysis of the legs and wings were the chief symptoms. Maurer obtained similar results by feeding fowls with oxalic acid. Recently Dr. Adolphus Treutlein has confirmed and extended these observations. He fed fowls on oxalic acid, soluble oxalates and rice-meal, and obtained the same results in each case. On microscopic examination he found both in the heart and peripheral nerves a condition of fatty degeneration closely resembling the pathological lesions of human beri-beri. He attributes these changes to a separation of calcium from the tissues owing to the action of the oxalic acid introduced, or produced by decomposition of the rice-meal in the crop of the animal. By administering an excess of calcium carbonate in the food Dr. Treutlein was able to arrest the symptoms and check the pathological changes in the heart and peripheral nerves.

In this way the oxalic acid was probably neutralised by the calcium and its deleterious effects prevented. In five cases of human beri-beri Dr. Treutlein found in the urine crystals of calcium oxalate far in excess of the amount present in normal urine. According to these results, the administration of calcium salts might also prove efficacious in human beri-beri and arrest the morbid process, at any rate in the early stages. Dr. Treutlein is hopeful that, owing to the close similarity of these morbid conditions in fowls to human beri-beri, the pathology of this disease may be elucidated by further researches on these lines, but it does not appear to have occurred to him to make practical use of the obvious therapeutic deductions. At any rate, there is no account of any attempt to test the value of calcium salts in the treatment of the disease.

Chemical Research in Great Britain.

IN his address as President of the Chemical Society, Professor Meldola gave an extremely gloomy and depressing account of the position and prospects of chemical research in Great Britain. He recognises that valuable work has been accomplished in such special institutions as the Royal Institution and the Davy-Faraday Laboratory, and that gratitude is due for results obtained by the Royal College of Science, the Central Technical College, and the Pharmaceutical Society. But, excluding these and some few other organisations, he finds little on which to erect a cheerful forecast. Our educational centres, such as universities and university colleges, judged by the continental standard, are pronounced to be distinct failures, and, with the exception of Manchester, it cannot be said that any one of them has developed an active school of chemical research. For this result, ancient traditions, defective educational methods, and want of sufficient means, leading to the frittering away of the research faculty by the drudgery of coaching, are held by Professor Meldola to be responsible. Nor can a more favourable verdict be passed on some modern educational organisations. Under Acts of Parliament passed in 1889 and 1890, large sums of money were placed at the disposal of county councils for the development of technical education, and though the primary object here was the improvement of technical skill, and knowledge of scientific principles among the artisan class, it was hoped that the new centres would offer to the appointed teachers opportunities for the cultivation of research work. The actual result is described as profoundly disappointing. And the failure is ascribed, not to the want of ability on the part of the teachers, but to the demands which are made on them to provide teaching for those wholly unprepared to receive it. Behind this, too, lies the entire want of appreciation of the importance of science and scientific research to the maintenance and development of the national welfare. This is the mental attitude of most popularly elected bodies in this country, and it cannot be doubted that, at least in this respect, the representatives accurately express the views of their constituents.

MEDICAL OPINION AND MOVEMENT.

THE surgeon is frequently called upon to operate, with a view to relieving some condition which falls under the general heading of "the acute abdomen," without previously being able to arrive at a definite opinion as to the pathological lesion he is likely to find. In such cases, when there are no clear indications even of the region or viscus involved, it is usual to make an exploratory incision in the middle line below the umbilicus. Mr. Charles P. Childe, surgeon to the Royal Portsmouth Hospital, questions the advisability of this site for the incision, and advocates in preference the right semilunar line as the position of election. By a well-reasoned series of arguments and by a careful enumeration of all the possible causes which may give rise to the so-called "acute abdomen," he shows that the majority of these causes occur within an area of the abdomen which is most accessible and which can be most easily inspected by such an incision. As he points out, the success of the operation often depends upon a speedy recognition of the cause of the trouble, and for this purpose the choice of the site of incision is of the greatest importance. The usual median incision certainly gives the most ready access for the hand to all parts of the abdomen, but the incision he proposes is not far inferior in this respect, and it certainly appears to afford a better opening for the direct inspection of the greater number of lesions which are likely to underlie these conditions. Even with the experienced tactile skill of the surgeon, "an ounce of sight is worth a ton of touch."

CHLORETONE is a comparatively new drug, and is chiefly known as a sedative, both local and general. It is a white crystalline substance, only slightly soluble in water, but easily soluble in glycerine, alcohol, petroleum, and oil. It may be given in doses from 5 to 25 grains. It has been found useful in painful and irritable conditions of the stomach, and appears at the same time to retard fermentation. On this account it has been used to prevent sea-sickness, and has a considerable reputation in this respect. It is, in fact, regarded by some as a specific against the baneful effects of the motions of the ocean. Dr. W. Essex Wynter, of the Middlesex Hospital, has given considerable attention to the therapeutic value of this drug, and he has used it successfully in the treatment of chorea. He gives it in 5-grain doses in petroleum emulsion three times a day for two or three days, and then gradually reduces the dose. He has treated in all 14 cases, and has experienced uniformly good results. The treatment was continued for five to ten days, and in that time the chorin movements ceased, and the drug was replaced by tonics such as steel wine and arsenic or cod-liver oil. Even for mild cases this is a rapid recovery in comparison with what one usually expects under ordinary methods of treatment. But, according to Dr. Wynter, many of the cases were of a fairly severe type. It will be interesting to hear if a more general use of the drug confirms his results.

It is always difficult to devise measures of public utility which will effectually remedy some existing

defect in the social cosmos without exerting a baneful influence in some other direction. The present high mortality of infants is undoubtedly a question of great moment, and one of national importance, and it is generally agreed that improper feeding is a factor of the greatest significance in this respect. In order to provide the infants of the poor with a milk sterilised and properly prepared for their consumption, leading medical authorities have for some time urged the establishment of municipal milk depôts, and a Bill has lately been introduced into the House of Commons by the President of the Local Government Board to authorise local authorities to establish such depôts. Such a measure, by ensuring a supply of pure milk in a suitable condition for infant feeding, should materially conduce to a reduction in the heavy mortality among artificially fed infants. So far so good. What then of the possible evil results? In the first place, there is the tendency to lessen parental responsibility, which is inherent in all State or municipal measures, having as their object such care and provision of the children as naturally fall to the parents. But a point of still greater importance to consider is how far such measures will tend still further to reduce the proportion of breast-fed infants. When hand-feeding is made safer and easier, by the supply of milk ready prepared for the infant, will not the mother more readily yield to the temptation to give up suckling her infant?

THIS question has been ably discussed in an interesting paper by Dr. John F. J. Sykes, medical officer of health for St. Pancras. He emphasises the importance of influencing the health of the next generation through the health of the mother, and points out clearly that measures of reform should be directed to ensuring more favourable conditions for carrying out the maternal functions of pregnancy and lactation. As Dr. Sykes says, "In the hygiene of the expectant and suckling mother is contained the most powerful preventive of infantile mortality. If hand-feeding is encouraged, breast-feeding will be discouraged; if breast-feeding is discouraged, the incentive to maintain the health of the suckling mother will no longer remain; and if the prospect of suckling be removed, the preparation of the expectant condition of the mother will be neglected." Dr. Sykes makes many suggestions in regard to the limitation of the work of the mother both before and after confinement, and the provision for suckling the infant in cases of women employed in factories and workshops. He further proposes that some provision of supplemental feeding should be made for necessitous suckling mothers, guarded against abuse by the certificate of a woman inspector or voluntary visitor, and by a medical certificate as to health and breast-feeding. There can be no question that any measure which would encourage breast-feeding, and enable the mother to carry it out, would be of far greater utility in the prevention of infant mortality than any means that might be adopted to secure the most perfect form of bottle-feeding.

HOSPITAL CLINICS.

CONCERNING STIFFNESS OF THE SPINE.

By SIR WILLIAM BENNETT, K.C.V.O.

A Post-Graduate Lecture delivered at the London School of Clinical Medicine (Seamen's Hospital).

GENTLEMEN,—It is, I presume, hardly needful to say that symptoms are not in proportion to the gravity of the disease by which they are caused, since it is common knowledge that grave disease may exist without noticeable symptoms, and that distressing symptoms may be associated with comparatively trivial complaints. It would be difficult to find a better illustration of this fact than that provided by certain cases of rigidity of the spinal column, a condition which, on the one hand, may be a symptom of the greatest moment, and on the other may be of no real importance at all provided that an accurate diagnosis of its causation be arrived at.

The cases included in the following table, which represents only those examples which have come under my personal observation, and is not intended to be a complete list, will show how large a field the question of rigidity of the spine covers, and how many factors are concerned in its production, more I fancy than are ordinarily realised:—

TABLE OF CAUSES OF STIFFNESS OF THE SPINE WITHOUT VISIBLE DEFORMITY, AND EXCLUSIVE OF ACUTE CONDITIONS.

| | | |
|---------------------------|---|---|
| PERSISTENT ... | { | Tuberculous Disease |
| | | Osteo-arthritis |
| | | <i>Spontaneous Ankylosis (Spondylitis?)</i> |
| | | Effects of Empyema |
| | | Malignant Disease |
| | | Hydatid of Vertebrae |
| | | Aneurysm |
| | | <i>Old Fracture</i> |
| | | <i>Traumatic Myositis Ossificans</i> |
| | | <i>Congenital peculiarity</i> |
| INTERMITTENT OR RELAPSING | { | Senile rigidity |
| | | Neurosis. N.B.— <i>Neuro-mimesis</i> |
| | | Chronic Rheumatism. Muscular and Fibrous |
| | | Worms |
| | | <i>Morale Kidney</i> |
| | | <i>Renal Calculus</i> |
| | | <i>Stone in Ureter</i> |
| | | <i>Hip Disease</i> |
| | | Reflex |
| | | Early Tuberculosis |
| TEMPORARY OR TRANSIENT | { | Gumma |
| | | Sprains and Wrenches |
| | | <i>Rickets</i> |

NOTE.—The lines in italics refer to the less commonly recognised causes of stiffness of the spine and are those towards which the remarks in the lecture are mainly directed.

The whole subject is, as can readily be seen, far too large to be dealt with in a single lecture, or indeed in several lectures of this kind; all, therefore, that I propose now to do is to call attention to certain broad features in some of the varieties of spinal stiffness, with a view especially to combat an impression which seems to be far too prevalent, that anything like pronounced rigidity of the spine, in the absence of congenital and acquired deformity, is a strong indication of tuberculous disease—an impression which I have reason to know too often leads to faulty treatment.

DISTRIBUTION AND CHARACTER OF STIFFNESS.

Distribution of the Rigidity.—This may involve the whole length of the spine or may be confined to limited areas, e.g., the lumbar, dorsal, or cervical regions separately; in rare cases two distinct areas, e.g., the cervical and dorso-lumbar, may be involved, the intervening parts of the vertebral column retaining their suppleness.

The Characteristics of the Stiffness.—(1) The stiffness may be absolute, that is to say, the spine or the portion of it involved may be rigid like a bar of iron, even when the patient is anaesthetised. (2) The stiffness may be “sub-absolute,” that is to say, complete in ordinary circumstances, but disappearing under the influence of an anaesthetic, the rigidity recurring upon the recovery from the anaesthesia. (3) The stiffness, although at first apparently absolute, becomes, upon proper examination, modified, with the result that the spine begins to “give” in a succession of jerks in consequence of the stammering of the muscles—a condition which I have ventured to call the “stammering spine.” (4) The stiffness may be, as indicated in the table, persistent, intermittent or relapsing, and temporary or transient.

PERSISTENT STIFFNESS.

ABSOLUTE RIGIDITY.—This may be divided into two varieties, that which is unaffected by the administration of an anaesthetic, and that which disappears under anaesthesia. These cases may again be considered under two heads—those occurring during adolescence and under the age of twenty-five, and those occurring later in life. In the former, if the rigidity persists under anaesthesia, the cause is probably either tuberculous disease or congenital peculiarity. In tuberculosis other symptoms are generally sufficient to settle the question, but it is a mistake to suppose that the rigidity of tuberculosis is always associated with pain or tenderness, as sometimes both symptoms are wanting.

It is somewhat surprising that congenital stiffness of the spine, affecting almost invariably the lumbar or dorso-lumbar region, is so little recognised, as it is not altogether rare; the importance of a proper estimate of it is obvious. The following example is sufficient to show this: Whilst a girl eight or nine years old was taking her bath her mother thought that she moved as if her back was stiff, and therefore sought advice of a medical man who found complete immobility of the vertebrae in the lumbar and lower dorsal region without any deformity. The child seemed perfectly well, had been playing hockey and other games, and showed no signs of any defect. At the same time the rigidity was naturally a cause of anxiety, and the patient was referred to me. Upon examination the

lumbar spine was absolutely rigid, there was neither pain, tenderness, nor deformity; in walking there was a slightly peculiar gait, unnoticeable under ordinary circumstances. Having seen cases before of the same kind, notably one recorded in the "Clinical Journal" of November 11, 1903, I at once suspected the cause of the condition, and, upon examining other members of the family, found the same peculiarity in two of them. The importance of recognising such a condition is clear, as failing such a recognition the temptation to err on the side of safety by treating a case of the kind as one of tuberculosis would be very strong. In a case, therefore, of stiffness of the spine without pain or deformity in a young subject, I never fail to inquire carefully into the condition of the spines of other members of the family.

In the absolute stiffness of old people, osteoarthritis or spontaneous ossification, may, in the absence of other distinct indications, be assumed to be the cause, due allowance, of course, being made for the rigidity being possibly due to cured conditions (*e.g.*, tubercle) in early life.

A CHARACTERISTIC CASE.

In the intermediate period between adolescence and old age a variety of causes such as those enumerated in the table, may account for the condition, and the clinical symptoms are generally sufficient to prevent any mistake in the diagnosis. The revelation of the *x*-rays in injury to the cervical spine makes it clear that fracture of the spine, principally affecting the laminae, but sometimes involving the bodies, ending in recovery, is more common than has hitherto been supposed, and that such cases are followed by stiffness, which varies, of course, according to the severity and distribution of the injury. I have at the present time a case under observation which illustrates this condition well; the patient is a man approaching 35 years of age, and the cause was a hunting accident. In persistent stiffness following injury traumatic myositis ossificans must not be overlooked as a cause, as although the disease does not, of course, affect the spine itself, the conversion of adjacent muscle into a calcified mass may cause a rigidity as firm as if the spine itself were involved. The following is a characteristic case:—A man 35 years old slipped downstairs in running to catch a train. Although a good deal shaken, he went about his business at once in the ordinary way, but was unable to resume it on the following day in consequence of the pain in his back "across the kidneys"—he seems to have been laid up for some months, "on and off," but finally got sufficiently well to do what was absolutely necessary in the way of getting about—his back, however, always remained stiff, bending being difficult and in wet weather painful. For this stiffness he consulted me some three years after the accident, not having previously seen a medical man for about two years. On examination of the spine was absolutely stiff over the lumbar region, the dorsal portion being supple. There was no pain, tenderness, or any visible abnormal condition, but on the right side of the lumbar spine, corresponding in outline and situation to the

quadratus lumborum muscle, over which the erector spinæ seemed harder than usual, was a mass of stony consistence, quite insensitive and absolutely fixed; the lumbar spine and the mass moved as a solid whole. The *x*-rays showed an opaque area corresponding to the mass mentioned, the nature of which admitted of no doubt. Nothing, of course, could be done beyond telling the patient to make the best of the situation and to get as much compensatory movement in the parts by means of exercise as was feasible. I afterwards heard that a diagnosis of malignant growth had been made, but this was obviously the result of either an imperfect examination or because the practitioner concerned had previously had no experience of such cases. These masses, resulting from traumatic myositis ossificans are, in some respects, it is true, suggestive of a growth; indeed, operations have been proposed in some cases in consequence, but to any person familiar with the condition the mistake is not likely to arise.

A CLINICAL SIGN.

2. *The Stammering Spine.*—In the condition referred to in the foregoing remarks the rigidity is so complete that there is little probability of any mistake occurring. There is, however, a form of persistent rigidity which, although only apparent, is at first sight so absolute that unless an examination of the right kind be made, errors in diagnosis are more than probable. This form of rigidity is due to muscular contraction or spasm, and is most frequently met with in muscular rheumatism, hysteria, neuro-mimensis, and as a consequence of reflex irritation (*vide* table), and so sometimes is the fixation of the vertebrae that a condition of absolute rigidity is produced. Bearing in mind the essential factor—muscular contraction—in these cases, it is obvious that any method of examination of a rigid spine should be made with a view to eliminate the question of deception from this condition.

Excepting cases of inflammation, congenital abnormality, or central nervous disease, it will be found that when stiffness of a joint, vertebral or otherwise, is due to muscular spasm, relaxation of the muscles concerned for a longer or shorter period is merely a question of putting strain upon them for a sufficiently long time. The relaxation may be only momentary, but it will come, and however short the term of relaxation may be, it is sufficient to provide the key to the situation.

The administration of an anæsthetic would, of course, at once settle the question of the relation of muscular spasm to the rigidity; but it should be borne in mind that the anæsthetic, although it may set at rest the question of rigidity, often veils, for the time being, other symptoms of importance. Moreover, the administration of an anæsthetic unnecessarily is not to be commended. In the examination to determine the points under discussion, all that is necessary is that the patient, stripped to the hips, standing with the back to the observer, should bend forward in the usual way, the lower limbs being kept extended at the knee; the hand of the observer at the same time resting upon the rigid portion of the spine. The bending forward of the trunk

having been carried out as far as possible, the patient should not immediately begin to resume the upright position, as is usually done in the examination of spinal cases, but should maintain the bent position for a considerable period, at all events for two or three minutes. It will then be found that if the rigidity is due to muscular action, a slight quivering of the muscles lying under the hand of the investigator will occur; this quiver will, if the bent position be still maintained, be replaced by a series of jerks (stammering), until in some cases the flexibility of the vertebral column can be freely established. In infants and the very young this method is obviously unpracticable, but in such the same end is attained by resorting to the only delicate test of spinal rigidity available, namely, by placing the small patient flat on the back and lifting it off the couch or bed by one hand placed beneath the spine; when held up in this way for a minute or so, if the rigidity is due to muscular causes, the result mentioned will follow. So far as I know, this method of testing the rigidity or flexibility of the spine of infants or very young children is the only truly reliable one. The method of placing the child in the prone position and moving its lower limbs and pelvis from side to side is far less sensitive. I know of no more important point in the diagnosis of rigidity of the spine than that afforded by the "stammering spine," and it is a point which may altogether escape notice if the patient, whilst being examined, is allowed, after bending in the orthodox manner, to resume the erect position immediately.

SOME ILLUSTRATIVE CASES.

3. (a) A boy, just passing from the adolescent period, of a markedly neurotic type, and the offspring of somewhat "highly strung" parents, was reported to have had a slight accident in the football field, followed by some pain and stiffness in the lumbar region. He apparently recovered, but as he walked rather stiffly and became easily tired, he was seen by a medical man, who, finding rigidity of the spine, came to the conclusion that the lad was the subject of tuberculous disease, and advised complete rest on the back for a period of twelve months, to be followed by the use of a spinal jacket. As this rather drastic suggestion came upon the parents as a complete surprise, they were reluctant at first to resort to the treatment without the support of a further surgical opinion. The physician concerned in the case consequently referred the boy to me. Upon examination, he was found to be an elongated "weedy" looking subject, obviously still suffering from the nervousness of adolescence; discomfort in the lower part of the back was complained of, and he tired very quickly after exertion; he preferred to rest or loll on a sofa, etc., rather than to exert himself, on the grounds of the discomfort, sometimes amounting to pain, which followed any but the slightest efforts at movement. The whole of the lumbar and dorsal spine was stiff; at first sight absolutely so, but upon applying the test I have described a distinct quivering in the erector spinæ soon commenced, and the typical stammering movements followed. Further careful examination

having failed to elicit any other evidence whatever of tubercle, I advised massage and rational exercise under proper supervision; these were subsequently carried out, with the result that in a couple of months the boy was sound and strong. He went at once to a public school, and never ailed anything afterwards, although it is some years since the treatment was carried out. It is clear that in this case a knowledge of the stammering symptoms in rigidity of the spine prevented the adoption of a treatment of long-continued confinement and rest, which from every point of view would have been bad.

(b) A middle-aged man, who came of a tuberculous stock, complained of a very intractable kind of lumbago, which persisted so long as to become a serious obstacle to business. Upon examination the lumbar spine was apparently quite stiff, and remained so during the ordinary test of bending with immediate return to the erect position. The erectors spinæ were very hard and rigid. Under the stammering test, however, the usual quiver in the muscles, followed by subsequent jerkings, was felt. The question of tuberculous disease having been thus eliminated the patient was sent to a continental watering-place and returned in good health. The occurrence of this symptom of stammering may be held to be absolute proof of the absence of organic disease of the vertebral column.

THE STAMMERING JERK.

It is interesting to note, although I do not know that the fact is of any special clinical value, that in the stammering spine the jerks occur in two forms, in the one the first jerk, which is brief, is followed by a succession of increasingly long relaxations in the muscles until sometimes a condition of nearly natural suppleness is arrived at. The process may, in fact, be diagrammatically expressed by the following markings:

In the other form the first muscular relaxation is long, those succeeding becoming shorter and shorter until, in some cases, a condition of apparently complete rigidity may be resumed, the diagrammatic expression being thus:

The former type is, so far as I know, limited to cases of "hysteria" and neuro-mimesis, the latter is mainly confined to cases of rheumatism and recent sprains and wrenches.

(To be continued.)

REFUSE DESTRUCTORS.—A refuse destructor is an absolute necessity in every well regulated institution where a large amount of dangerous or putrescible waste is produced. Nowadays there are many types of the forced draught combustion destructors on the market. Messrs. Meldrum Brothers, Ltd., of Timperley, Manchester (London offices, 66 Victoria Street, S.W.), make a speciality of small high-temperature destructors, and their new catalogue, which is profusely illustrated, gives details of several economical models. We have seen their apparatus at work in the various institutions under the control of the Metropolitan Asylums Board, and can bear witness to their efficiency. The catalogue, which is more than a mere enumeration of prices and measurements, gives interesting details of the various models which the firm supplies and of their working.

PATHOLOGY IN GENERAL PRACTICE.

The Demonstration of the Different Cocci and their Significance.

THE different forms of cocci may all be very easily stained by any of the ordinary basic aniline dyes. For the general practitioner who is not dealing with cultures, the organisms will have to be detected in pus, sputum, urine, and other discharges, and he must proceed by making smears, of whichever of these he is to examine, on slides or coverslips. It is essential that such smears should not be too thick, and the best way of making them is to use a looped platinum needle to spread out the material. After this they must be fixed, and this is easily accomplished by passing them several times over the flame of a Bunsen burner, a very useful practical point being to hold the slip or slide in one's fingers so as to be able to tell when too much heat is being applied. All this having been satisfactorily accomplished, a stain has next to be selected, and it is convenient to have a series of stock solutions ready prepared on one's bench, one, say, of methylene blue, one of thionin blue, and one of fuchsin. These ought to be kept in ordinary glass bottles that have had their stoppers replaced by glass funnels with filter paper, so that each time before use all that will be required is to drop a little of the fluid into the funnel, and, holding this over the slide, to let the filtered result drop on the film. This ensures a clean specimen, and no deposit of stain to obscure and mask the picture. The following are the formulæ of some of the commoner stains:—

I. *Methylene Blue Saturated Aqueous Solution,*

or

II. *Methylene Blue Saturated Alcoholic Solution.*

Stain for half a minute, wash, dry, and mount.

III. *Alkaline Methylene Blue (Löffler's solution).*

Saturated solution of methylene blue 30 parts

Solution of caustic potash of 1 : 10,000 100 parts

Stain for half to one minute. If colour too deep, decolorise with $\frac{1}{2}$ to 1 per cent. acetic acid till film becomes pale-blue green, wash, dry, and mount.

IV. *Kühne's Methylene Blue.*

Methylene blue 1.5 parts

Absolute alcohol 10 parts

Carbolic acid (5 per cent.) 100 parts

Stain for $\frac{1}{2}$ to 1 minute or longer, decolorise if necessary with weak acetic or hydrochloric acid. Wash, etc.

V. *Thionin Stains.*

a. Thionin crystals 1.5 parts

Absolute alcohol 10 parts

Carbolic acid (5 per cent.) 100 parts

or

b. Thionin crystals 1 part

Dissolve in 100 parts carbolic acid solution 1-40, dilute one volume with three of water, and filter; stain for $\frac{1}{2}$ to 1 minute with the stronger. If decolorisation is required acetic acid may be employed. Wash, etc.

VI. *Carbol Fuchsin Stain.*

Fuchsin 1 part

Absolute alcohol 10 parts

Dissolve and add 100 parts of a 5 per cent. solution of carbolic. Stain for half a minute for ordinary films.

Besides those there are plenty of others, the more important being methyl violet, gentian violet,

toluidin blue, Victoria blue, safranin, Bismarck brown, etc. After staining, all films should be very thoroughly washed, then dried and examined with the $\frac{1}{2}$ in. oil immersion lens, direct if only required for diagnosis, mounted in Canada balsam if for permanencies. There is absolutely no difficulty, then, in this technique, and for future reference we will refer to it as simple staining. The next method is more complicated, but is important because by it some of the different cocci can be differentiated from each other: it is termed Gram's stain or Gram's method. For this we require gentian violet, aniline oil, a solution of iodine, alcohol, and some counter-stain, preferably a pink one. The aniline oil and gentian violet are mixed together as follows:—Take a test tube and fill it with distilled water; to this add a few drops of aniline oil, and shake it up until an emulsion is formed; then filter this into a small glass flask. A certain amount of the oil, it will be found, has dissolved in the water, and this may therefore be termed aniline water. Next, to this add a few drops of a saturated alcoholic solution of gentian violet, enough to make the solution deep purple, and then we have our aniline gentian violet. The iodine solution consists of iodine 1 part, potassium iodide 2 parts, distilled water 300 parts. There are different ways of using the stain, some preferring counter-staining first, others later; but the following may be taken, not specially as the best method, but as useful as any. The film, say of pus, sputum, or other discharge, having been made in the usual manner and fixed, apply a little aqueous or alcoholic solution of eosin to it for half a minute. Wash. Pour on aniline gentian violet for five to ten minutes, washing this off in turn with water. Iodine solution then for one minute. After this, alcohol till the violet colour all disappears and the original pink colour returns; then dry, and mount. If Gram staining cocci are present, and the method has been properly carried out as described, the organisms will be purple, the tissues pink, the contrast being very striking. Most of the cocci produce pus, and those that chiefly concern us are the staphylococci, the streptococci, the pneumococcus, the gonococcus, and the meningococcus. The former, the staphylococci, get their name by being shaped like clusters of grapes; they are widely distributed in nature, being present in the dust of rooms, the mouth, the skin, and other places; while in pathological conditions, such as acne spots, boils, abscesses, and the like, they are usually present and are, indeed, the causative agent. They can easily be demonstrated by making smears on slides, staining by any of the simple methods, or by Gram's stain, as they retain the latter. The different species cannot, however, be detected morphologically by staining; for this we require to grow them on different culture media, where they develop and produce different colours and features. In our next issue we hope to be able to discuss the streptococci, gonococci, pneumococci, and others of importance.

POINTS IN DIAGNOSIS.

THE EARLY DETECTION OF TUBERCULOSIS OF THE BLADDER.

TUBERCULOUS ulceration of the bladder has often been regarded as (1) rare, (2) almost incurable. Modern clinical methods have shown, however, that neither of these characters is true. When looked for, the lesion is found to be not at all uncommon; and, far from being incurable, there is increasing evidence to show that the lesion often gets well by itself.

THE CLASSICAL SYMPTOMS.

The chief reason why the lesion used to be thought both rare and incurable was that the symptoms as described in text-books are not the symptoms merely of tuberculous ulceration of the bladder, but are those of this condition in its late stages. They are: Pain in the hypogastric region, often paroxysmal in character, and frequently referred also either to the perineum or to the base or tip of the penis; pyuria more or less constant; hæmaturia, usually held to be comparatively slight in amount, and infrequent; and, above all, inability to hold the water for any length of time, owing to the pain produced by distension of the infected bladder, and consequent frequency of micturition, attracting attention, mostly at night, because of the disturbance to sleep; the frequency of micturition differs from that due to granular kidney, for example, in that only an ounce or two of urine may be passed at each time.

These symptoms are obviously due to extensive ulceration of the bladder, with exposure of the nerves in the submucous coat, and inflammation which has led to contracture of the viscus. We will at present confine our attention to the bladder, and we would repeat what we have said above, that the classical symptoms of tuberculous ulceration of the bladder are late symptoms; if we wait for all of them to present themselves we allow the condition to pass beyond the curable stage. No physician would wait until there was profuse nummular sputum, with cavernous breathing at one or more apices of the lungs, before he diagnosed phthisis; to wait for the full development of all the symptoms of vesical tuberculosis is to wait until the disease in the bladder has reached the stage corresponding to cavitation in the lung. It is the duty of all of us to try and make the diagnosis much earlier in the case of the bladder, just as in the case of the lung; early diagnosis may save many patients from a painful and slow death.

THE EARLIEST SYMPTOMS OF TUBERCULOSIS OF THE BLADDER.

The symptom of all others which should never be passed by without every effort being made to determine its exact cause is *frequency of micturition*. This frequency must not be due to more than the usual amount of urine being formed, as is the case, for example, in diabetes mellitus, diabetes insipidus, granular kidney, arteriosclerosis, and

functional disorders of the nervous system; but to inability to hold more than a small amount at a time. In an old man this symptom would indicate enlargement of the prostate with residual urine; in a young person inflammation of the bladder is the most likely cause, and if the nature of the inflammation is not obvious it is very likely to be tuberculous.

Another, but less common, early symptom may be *hæmorrhage*. The two remaining symptoms—pain and pyuria—may each of them be the first symptom of the lesion; they are more likely to lead to the discovery of the nature of the lesion than is frequency of micturition with the passage of comparatively small amounts of urine each time, or hæmorrhage.

HOW TO DISCOVER THE NATURE OF THE LESION.

There are three chief means of determining the tuberculous nature of the bladder trouble, and these are:—(1) Staining the centrifugalised deposit of the urine for tubercle bacilli; (2) determining the tuberculo-opsonic index of the patient, with or without injections of minute doses of tuberculin; (3) cystoscopy of the bladder.

It is obvious that the first of these three is by far the simplest and least expensive. It is, moreover, extremely efficacious in most cases. One is apt to conclude that to detect tubercle bacilli in urine is both difficult and uncertain; in experienced hands, however, this is by no means the case. *Tubercle bacilli have not infrequently been detected in apparently clear urines.* The fact that a urine contains no pus is, therefore, no proof that it should not be examined for tubercle bacilli. When tubercle bacilli cannot be found, then opsonic index estimations may be of assistance; and in any case, the cystoscope is invaluable in determining the extent of the lesion. A boy of 17 recently came up, complaining of "not feeling quite well, and of having to get up twice each night to pass a little urine." So indefinite were his symptoms that some thought he had no lesion at all. The urine was examined for tubercle bacilli, but none could be found. The tuberculo-opsonic index of the boy's blood was estimated, and turned out to be 1.5. This made a tuberculous lesion somewhere almost certain. The cystoscope was used, and large numbers of nearly-healed tuberculous ulcers were seen coated with phosphatic deposit. The condition was healing by itself, and the case taught at least three things:—

(1) That the symptoms of tuberculous bladder may be very slight indeed; (2) that the lesion may in such cases be very easily missed altogether, so that it is probably more common than recognised; (3) the condition, far from being incurable, may get well by itself, and is therefore amenable to treatment if every effort is made to detect it sufficiently early.

POINTS IN TREATMENT.

CHRONIC OR SUBACUTE ARTHRITIS: THE HOT SAND BATH TREATMENT.

THE value of local heat in the treatment of sub-acute or chronic joint affections is undoubted. It is even probable that there is no other therapeutic agent which, used alone, can do so much good in these conditions. For the purposes of the present discussion it will be supposed that the patient under treatment is a man of between 20 and 30, who has had gonococcal synovitis of several joints, but who has recovered except as to one knee which remains painful and stiff and threatens to become fixed by pseudo-ankylosis.

Such patients are common enough, and it is often difficult to know what is the best treatment for the knee. Almost everything may have been tried, and yet the joint remains affected subacutely. The method adopted in many hospitals, and in private houses where electric lighting is laid on, is a radiant heat bath, given once a day as follows:—Over the affected leg a tall cradle is arranged; on the top bar are four 32-candle-power electric lamps, which can be connected by a wire to a wall plug and the electric main. Over all is thrown a blanket; outside this a mackintosh sheet, and outside this again the rest of the bed-clothes, the whole of the coverings outside the cradle being most carefully tucked in all around to prevent the escape of any heat. The lamps give off not only light, but also radiant heat; the result, therefore, is that the air inside the cradle becomes gradually hotter and hotter, until the affected knee is submitted to an intense heat.

THE RATIONALE OF THE TREATMENT.

The rationale of the treatment is as follows:—If a piece of meat were subjected to this degree of heat it would be cooked; the living tissue, however, is able to keep down its own temperature below cooking point. This it does in at least two ways: in the first place, by profuse local perspiration, the evaporation of which keeps on taking up heat; secondly, by the mechanical carrying away of the heated blood that has circulated through the limb; the latter factor alone would lead to a greatly accelerated local circulation, but when fresh blood is constantly being required for the production of more sweat, the total increase in the volume of blood that has to circulate round the affected knee when it is subject to such a radiant heat bath is enormous. It is supposed that the benefit of the treatment is mainly due to this increased local circulation; how this in its turn acts is not known, though presumably the more fresh healthy blood flows round and through some forms of diseased structures, the greater is the likelihood of repair. The good results of the treatment are undoubted; nor is it only in gonococcal arthritis which is tending to become chronic that this form of treatment has been extremely good.

ITS SUBSTITUTE—THE SAND BATH.

Unfortunately in many places, both in towns and in the country, the electric radiant heat bath cannot

be resorted to. The question arises whether any substitute is possible. There is no other convenient way of subjecting a part to heat at such extremely high local temperatures, so that all substitutes are inferior to the method described above. Nevertheless there is one old-fashioned remedy which has a similar effect, and which, whilst costing almost nothing, can be used in the poorest house; this is the hot sand bath. Plenty of sand is needed; ordinary roadside sand will do, though sharp silver sand is better. If roadside sand be used, at least enough to fill two of the ordinary large cubical biscuit tins should be collected, and first of all well baked at almost a red heat both to dry it and to destroy the organic matter in it and render it aseptic. When once made clean and dry it may be kept in the biscuit tins and used again and again. The patient, when a sand bath is to be given, lies with a mackintosh under the knee or other part to be treated; by a suitable arrangement the mackintosh can be made to form a sort of trough or well in which the knee lies; the object of this is to prevent the sand from spreading too far laterally in any direction away from the knee. When all is ready, and the sand in the tins is so hot that a hand dipped into it can only just be held there, the tins are brought in from the kitchen, and their contents gently poured all round and over the knee, covering both it and about nine inches of the leg above and below it. The amount of sand that can be borne will depend upon the amount of painfulness to pressure there may be; but if possible the knee should be buried several inches deep in the very hot sand. A mackintosh is put over the top, and over this a blanket to keep the heat in, and the knee is left in the sand bath for 20 minutes, half an hour, or more, as the case may be. The only object, apart from its cheapness, of using sand rather than anything else is, of course, the great length of time that it takes to cool. When the bath is done the patient's leg is gently raised; the greater part of the sand remains upon the lower mackintosh, and can be readily poured back into the tins and got ready for the next application. There is still some left sticking to the patient's skin owing to the latter having become bathed in sweat; a pan of water should be brought under the limb, and with a sponge all this adhering sand can in a moment or two be washed off, leaving the limb and the bed both quite clean. It is a very good time to massage the leg now when it is hyperæmic and supple, if massage is required in the particular case. The relief afforded by this simple method of treatment is sometimes wonderful; the knee, the foot, the elbow, and the wrist are the parts to which it can most easily be applied, but with appropriate arrangements it is applicable to the shoulder, the hip, and even to the abdomen, and cases are constantly occurring in which one is but too glad to employ it.

POINTS IN SURGERY.

THE DIAGNOSIS AND TREATMENT OF FRACTURES.

THE USES OF THE RÖNTGEN RAYS.

THE practitioner will do well to keep in close touch with the advances made in the surgical treatment of fractures, not only for the sake of his patients, but also for the sake of his own reputation. Since the application of Röntgen rays as a guidance in the diagnosis and treatment of injuries to bones in the last ten years, and the introduction of massage, more advances are being made in our knowledge and treatment of fractures than was ever before possible. The practitioner cannot be regarded as fully equipped without the *x*-ray apparatus. It is suggested that, for mutual protection, a number of practitioners in the smaller towns should jointly set up a complete installation. The general public is becoming familiar with the application of *x*-rays. It realises that to see the position of broken bones in their relation to one another must be a guidance to the surgeon. Though in some cases and in certain fractures the methods of treatment which have long been recognised have undergone no material modification, yet it is reasonable and right that an examination by the rays should be made whenever possible.

Many important cases of litigation have arisen since the introduction and application of Röntgen's discovery. In more than one instance the defendant practitioner has failed to convince the adjudicators that all reasonable skill had been applied. Had a radiograph been available it should not have been difficult to show the skill which had been brought to bear, or that it had been reasonable. But it must also be borne in mind that a radiograph requires skilled interpretation.

The popular notion that by the employment of *x*-rays it is possible for the surgeon to set the fragments in perfect apposition, which can be portrayed, should be explained away. Some linear imperfection is inevitable in the most perfectly reduced fracture, and this is most readily explained by the fact that the radiograph is not a photograph of the object exposed to the *x*-rays, but is in reality a representation of its shadow. The rays diverge from the terminals in the vacuum tube, casting a shadow on the sensitive plate, a shadow which is greater than the object it represents.

Skilfully to interpret a radiograph, it is necessary to know the relative positions of, first, the point from which the rays emanate; secondly, of the negative plate; and, thirdly, of the intervening object casting its shadow on the plate. For a radiograph is a *silhouette*. The closer the object to the plate the more perfect the silhouette. It is for these reasons that to rely implicitly on the evidence which a radiograph seems to afford would lead into serious error. To understand, therefore, the meaning of the shadows we must compare shadows thrown from more than one direction. In the case, say, of fractures of both bones of the forearm, the limb

should be examined from the front and from the side.

A CASE OF FRACTURE OF THE FOREARM.

The following instance may be cited. A carpenter received a blow from a brick on his right forearm: he was at once seen by a medical man, who diagnosed by manipulation fracture of both bones about the middle of the shaft. The limb was put up with an internal angular splint, fixing the elbow and the wrist with the forearm, in a position midway between pronation and supination. Next day the patient went to another medical man, who was asked to assume charge of the case. This he refused to do unless the patient first had an *x*-ray examination. This was made without taking off the splints, and it was found that the radius and ulna were transversely fractured at the same level about the middle of the shaft. The fragments slightly overlapped, but what was more important, the upper end of the ulna was in apposition with the lower end of the radius, and had the bones been allowed to remain in this position all four fragments would no doubt have firmly consolidated abolishing all power of pronation and supination of the forearm, so that the patient would have been deprived of his means of livelihood.

The matter was explained to the patient, and he was advised to have a general anæsthetic to permit the correct readjustment of the fragments, the practitioner objecting to take charge of the case unless this was done. An anæsthetic was given, the splints were removed, and the limb was put up with an anterior elbow splint, with the elbow flexed, and the wrist fully supinated. Radiographs were taken in two directions, and it was seen that almost perfect apposition had been produced. The limb was treated by massage and passive movement, and in a few weeks complete function was restored. There is little doubt that without the use of *x*-rays in this case the patient would have lost the proper use of his forearm, and the practitioners might have been involved in a troublesome and expensive lawsuit.

FALLACIES TO BE AVOIDED.

By use of the fluorescent screen in the first place a clear impression may be obtained of the fracture, so that one may determine from what point of view a radiograph may be taken to give the best results.

Certain fallacies must be guarded against; for instance, epiphysal cartilages in young subjects have been mistaken for lines of cleavage due to fracture. In the injuries in the neighbourhood of joints, *e.g.*, the elbow, it is necessary to remember that unossified epiphyses throw no shadows. The ossifying centre of the epiphysis may be mistaken for a displaced fragment of bone. Remember, too, the dates of appearance of the ossific centres in the epiphyses. At the lower end of the humerus, this is especially important, in order to interpret the radiograph aright. The capitellum begins to cast a shadow about the third year, the internal condyle is

visible about the fifth year, when that for the capitellum is much larger. That for the trochlear appears about the tenth year, and the small centre

for the external condyle casts a shadow about the fifteenth year, when the other three centres are fused in one shadow.

OTOLOGY.

ACUTE OTITIS MEDIA.

ALTHOUGH affecting adults, this condition is particularly common in infants. In a child that is ill it is as essential to examine the ear as it is to examine the throat, as the following case illustrates:—

A well-fed child of 13 months was taken ill suddenly one evening, crying all night with pain. The temperature was 103. There was no sore throat. He was crying and fretful during the day, and wakeful the following night. The temperature remained between 103 and 104. There were no physical signs in the chest or abdomen, and the bones and joints were free. There were no digestive troubles. Influenza was prevalent at the time, and from this it was thought the child was suffering, especially as he had had a trifling cold in the head. On the fourth day the ears were examined, and there was no discharge.

Next day, that is the fifth, there was a sudden appearance of muco-pus in the left meatus, with some relief of pain, but the temperature still remained raised, and on the following night the child was as restless and wakeful as before. It was thought that the right ear was accounting for these symptoms. There seemed to be some relief afforded by hot applications to that side of the head. On the sixth day the ears were examined again. On the left side, after removal of thick stringy muco-pus by gently syringing with hot alkaline lotion and drying the meatus, the tympanic membrane was seen to be bulging and to have lost lustre; it was not injected, but was white as if sodden and cedematous. There was a pin-hole perforation through which a bead of muco-pus was escaping. On the other side there was no discharge, but the tympanic membrane was bulging, had lost lustre, and was uniformly red. There was no perforation. During examination the child remained quiet. The temperature was 103.

OPERATION.

Chloroform was given, and the left tympanic membrane was completely incised across, with a fine myringotome. With a freshly sterilised instrument the right membrane was also completely incised from above downwards. The fluid in the right middle ear was collected in a pipette, and was found to contain pyogenic streptococci which grew in cultivation in large numbers.

TREATMENT.

Both ears were syringed with alkaline boracic lotion, and in the meatus was laid a narrow strip of cyanide ribbon gauze, quite loosely, and reaching down to the incised membrane. In a week both membranes healed.

THE EXAMINATION OF AN INFANT'S EAR.

This is not always an easy thing to do. A good light is essential. The head mirror should have a short focal length, not more than 9 inches. Cerumen is seldom present, but the meatus is often narrow and curved, and fine downy hair may make it diffi-

cult to obtain a good view. Use the largest speculum which can be employed. The light should be directed along the roof and posterior wall of the meatus, while the pinna is gradually drawn upwards and backwards to straighten the canal until the tympanic region comes into view.

THE NORMAL MEMBRANE.

The most important landmark of the normal membrane is the processus brevis of the malleus, which forms a little white spot near the upper and anterior part. From this white spot downwards and slightly backwards should be traced the handle of the malleus, as a short and nearly straight streak. Often a minute vessel can be traced down the handle of the malleus. Near the centre of the membrane the malleus becomes lost to view. Below, and generally a little in front, of the lower end is seen a lustrous triangle of reflected light. The rest of the membrane is less lustrous. It should be possible to make out the attachments of the membrane at its margin to the tympanic ring. This is more readily distinguished in front and below, while posteriorly it is not easy to say where the meatal wall ends and the tympanic membrane begins.

INFLAMMATION AND ITS EFFECTS.

In acute inflammation of the tympanic membrane there is loss of lustre, and the whole field is injected red, so that none of the above-mentioned landmarks are visible except in the earliest stages. If inflammatory products accumulate in the tympanum the membrane is bulged outwards. In some cases the bulge may resemble a polypus in the meatus. More often it forms a red elevation, which appears to be partly on the posterior wall and partly in the tympanic region. In reality it is the posterior half of the membrane itself.

TREATMENT.

The first question to consider in such a case is, Should every bulging membrane be incised. In the case of pain, deafness, and pyrexia a very injected and bulging membrane should be freely incised. If there is deafness without much pain and no pyrexia, wait for, say, 12 hours and note the state of affairs. If there is still no rise in temperature, and the pain is subsiding and the bulging does not appear to be increasing, continue to treat by nasal and pharyngeal sprays to keep the Eustachian openings free from accumulation of discharge. A blood-count, to ascertain the number of leucocytes, should be made in difficult cases. If, however, pain returns or bulging increases, it is better practice to incise and drain freely than to wait for perforation to take place, or for the chance of its clearing up. If the membrane has already ulcerated and given way through a small perforation but is still bulging, it is better to incise freely than to leave alone. Otherwise the condition is very apt to become chronic, and will lead to permanent impairment of hearing.

THE GENERAL PRACTITIONERS' COLUMN.

NEPHRITIS FOLLOWING THE USE OF CERTAIN OF THE BALSAMS.

By JOHN ALLAN, M.B., Ch.B.Edin.

ATTENTION should, I think, be drawn to a fact which is not generally known, or at any rate not so widely known as it should be—namely, the production of nephritis by the use of certain balsams in the treatment of scabies. There have been recorded in German periodicals a few cases in which the serious condition of the patient was not recognised until the symptoms of acute nephritis had appeared. Having these cases in mind, I decided to watch carefully the effect of storax in some cases of scabies which came under treatment during the course of last year. All the cases were very chronic, and the disease had been going on for some weeks before they came under notice.

W. C.—, a little boy two years of age, first came under observation on September 1, 1906, and was found to be suffering from scabies, which was of some weeks' duration. The urine was examined and was found to be free from albumen. The following ointment was prescribed to be rubbed into the affected parts twice daily:—

| | | | | | | |
|------------|-----|-----|-----|-----|-----|------|
| Styracis | ... | ... | ... | ... | ... | 3j. |
| Ol. olivæ | ... | ... | ... | ... | ... | 3ss. |
| Ceræ flavæ | ... | ... | ... | ... | ... | 5ij. |

On the following Wednesday (September 5) the child was admitted to the Children's Hospital, Brighton, and, on examination, the urine was found to contain a considerable quantity of albumen. Sulphur ointment was substituted for the above, and three days later white precipitate ointment was employed. The urine did not contain any blood, and on microscopic examination no blood corpuscles nor tube casts could be detected. The albumen got gradually less, and by September 13 had disappeared from the urine. The disease had improved greatly, and was, indeed, cured with the exception of one small area on the left forearm and one small area on the dorsum of the left foot, where the disease appeared to be still active. To these areas the unguentum styracis was applied night and morning. On September 15 albumen in considerable quantity was again found in the urine. The sulphur ointment was again used, and this finally succeeded in stamping out the disease.

A second case was that of A. T.—, a boy 4½ years of age, who came under treatment for extreme wasting. He also had scabies which had been going on for a considerable time. Under treatment with sulphur ointment and white precipitate ointment considerable improvement took place, but the disease was not cured. On September 13, 1906, as no albumen was found in the urine, the unguentum styracis was applied. On September 16 albumen appeared in the urine, and so the storax was discontinued and unguentum sulphuris again applied.

This had the desired effect, and he left hospital five days later free from the disease.

Three other cases which were observed reacted in the same way.

If the storax had been pushed in these cases it is very probable that acute nephritis would have supervened. The fact that the albumen appeared in the urine after the storax ointment was applied and disappeared when that was stopped, and the further fact that of five cases which were carefully observed all reacted in the same way, prove that the albuminuria could not be mere coincidence. The cases, too, give a good illustration of the difficulty experienced in curing scabies if the condition is allowed to become chronic.

In testing for the albumen the cold nitric acid test was not relied on, for it is well known that nitric acid, or indeed any acid, precipitates the oleo resins.

I have been unable to find any record of this phenomenon by an English writer. In the *British Journal of Dermatology*, 1904, page 440, there is an abstract of Gassmann's paper (*Mun. Med. Woch.*, July 26, 1904). A man, age twenty-six, affected with scabies, had half the body treated with balsam of Peru vaseline for two nights. Acute nephritis supervened. Three per cent. of albumen was found, and there were tube casts and blood in the urine. In the *British Journal of Dermatology*, 1906, page 413, there is an abstract of a paper by Richarty (*Mun. Med. Woch.*, May 8, 1906). This refers to a patient sixteen years of age, treated for scabies with 10 per cent. balsam of Peru. There were three applications. Acute nephritis was produced, and death occurred in fourteen days.

These cases should cause one to exercise great care and judgment in using storax and balsam of Peru in such cases, but I do not think that their use is absolutely vetoed by these records. The production of albuminuria by them is no doubt alarming, but it is transient if they are discontinued as soon as the albumen appears. Sulphur ointment succeeds in curing the disease in the vast majority of cases, but in chronic scabies it appears to be occasionally insufficient to bring about a cure. In these obstinate cases storax or balsam of Peru, carefully applied, seems to afford a means of curing the disease.

I think it proper that the attention of the profession should be directed to the danger attending the use by inunction of storax and balsam of Peru, and I would urge that the urine of cases treated by such means should be frequently examined for albumen, and as soon as any albumen is detected their application should be at once discontinued.

I am indebted to Dr. A. W. Williams for permission to make use of the above cases.

PRACTICAL NOTES ON DIAGNOSIS AND TREATMENT.

Erysipelas.

THE chief characteristic of erysipelas is to invade fresh tissue by rapidly spreading at the margin; this feature is not found in any other similar affection, and it is of great value in diagnosis.

Syphilis of the Lung.

THE physical signs in this condition closely resemble those of chronic tubercle. The diagnosis depends on (a) absence of tubercle bacilli from the sputum; (b) history of infection; (c) other evidences of syphilis; (d) the result of anti-syphilitic treatment.

Pleural Effusion.

WHEN the fluid in a case of serous effusion has been drawn off the application of an ice-bag over the affected side, and continued for some days, always tends to hinder the fresh secretion of fluid. It is also an advantage to encourage the patient to take deep draughts of air into the lungs, as this promotes the expansion of the lung which had been compressed by the fluid effusion.—*Dr. Lees.*

Site of Spinal Lesion in Paraplegia.

EVERY compression or disease affecting a transverse section of the spinal cord above the lumbar enlargement has a tendency to increase the activity of the reflexes in the lower limbs. When the lesion is at the level of the lumbar enlargement the reflexes are lost, as the centres commanding the reflex arcs upon which the tendon jerks depend are then destroyed.

Concussion of the Brain.

THE symptoms generally attributed to concussion are due, not to the concussion itself, but to concussion of the brain or to extravasation of blood. Should symptoms of intracranial irritation or inflammation show themselves they should be dealt with actively. In the early stage the application of cold to the head by means of Leiter's tube is the most efficient local, and free purgation the most effective general, means, with a very low diet. If the inflammatory action is great, a free bleeding from the jugular vein or from the arm is to be advocated, and this operation may in many cases be repeated with much advantage. In chronic cases the value of mercury, taken internally, cannot be doubted.—*Mr. Bryant.*

Acute Inflammation of Middle Ear.

THE first step in treatment is to abstract blood from the ear. This is best effected by the application of one, two, or three leeches, according to the age of the child. A piece of cotton wool should be placed in the external meatus to prevent the entrance of blood. The leeches should be applied, if possible, inside the concha. If this is impracticable they should be placed in front of the ear or over the mastoid. After the bleeding has ceased the cotton wool should be removed, and water, as hot as can be borne, should be gently injected into the external meatus at frequent intervals. In the way of medicines, bromide of potassium and tincture of aconite are of great service.—*Mr. Wokes.*

Pruritus Ani.

THE following has been recommended as almost a specific in cases of pruritus ani:—Take of sulphate of zinc and alum equal parts; heat the two until all the water of crystallisation has been driven off, and dissolve the residue in water (3j. to 3j.). The solution must be applied freely to the site of irritation.

Vague Pains.

NEVER hastily pronounce a case of vague pains to be "neuralgia," "rheumatism," or the like. Care, and especially prolonged observation, will usually guide you to a correct conclusion, and will save you from the grave discredit of attributing to a trivial cause such serious maladies as bone disease, tumours, or internal aneurism.—*Mr. Marmaduke Shield.*

Asthma.

THE inhalation of pyridin, 10 to 20 drops placed on a pocket-handkerchief, will often give prompt relief. One of the most certain remedies is morphine by hypodermic injection; but in long-standing cases, with a dilated and feeble heart, this treatment is by no means free from risk.

Pain in Hæmorrhoids.

UNCOMPLICATED piles are never the source of acute pain. This is a useful clinical fact, as it will compel you to search for some special complication in every case in which a patient, the subject of piles, complains of acute suffering. The common causes of such pain are thrombosis, prolapse, strangulation, and fissure.—*Mr. Pearce Gould.*

Skene's Glands.

CATARRHAL inflammation of Skene's glands is one of the causes of "painful sitting." It also causes pain during coition, and may be associated with painful micturition. Hot sitz baths may give relief, but sometimes it is necessary to apply iodine or carbolic acid in glycerine to the interior of the glands, the orifices of which are close to the urethral opening.

Leucoplakia and Cancer.

A CASE of leucoplakia is more liable than any other tongue to have cancer developed in it, although such a result is not by any means a certainty. I would not remove a tongue simply because it had leucoplakia, but I should warn the patient that he must be very careful, and the moment any growth showed itself he ought to have his tongue removed.—*Mr. Christopher Heath.*

Opium in Cardiac Disease.

IN mitral and other forms of heart disease which are constantly accompanied in their later stages by distress and cough, restlessness and sleeplessness, opium is of great service. Many deprecate its use in these conditions on account of its action on the respiratory centre; but an extensive experience has taught me that it may be administered without fear if given in moderate doses by the mouth, as by this method the shock and depressant action on the heart, which render the use of the hypodermic method dangerous in such cases, are avoided.—*Dr. Cheadle.*

POOR-LAW INFIRMARIES: THEIR POSSIBILITIES IN THE FURTHERANCE OF MEDICAL EDUCATION.

By T. R. St. JOHNSTON, M.R.C.S., L.R.C.P., M.S.A., Senior Assistant Medical Officer,
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"Particularly he entertained me with discourse of an infirmary, which I mightily approve of; and will endeavour to promote it, being a worthy thing, and of use, and will save money."—Pepys' "Diary," January 29, 1666.

I. A HUGE WASTE OF GOOD MATERIAL.

WHAT is the main object of a Poor-law infirmary? At first glance one would say, "To take care of the infirm poor." Though this is the fundamental principle on which these institutions are founded, there are wider aspects to the question. Perhaps the summing up of the quaint old diarist, as written above, yields the clearest answer, "A worthy thing, and of use, and will save money." It is true that the infirmary of which he wrote was to be founded for sick and wounded seamen, but the same claims may be equally applied to any modern Poor-law infirmary.

That the relief of suffering and pain is a worthy thing no one will deny, that to collect the infirm poor and administer to their wants in one central building instead of at their own homes saves money is also a proved fact; but do we make the most use of our infirmaries? The question of infirmaries touches very closely a great social problem, namely, how far the successful ones in life ought to contribute to the maintenance of the unsuccessful. It is a noble idea that the more prosperous should help the unfortunate, but it is also a business transaction. And if—in the form of rates and taxes—one portion of the people is compelled to provide for the other portion, what return are the contributors to have for their money? That the system tends to a happy and peaceful community is true, that it tends to the curtailment of disease is also true; but cannot some further advantage be reaped from it? In large factories and commercial enterprises the actual articles produced often only just pay the cost of production, and the biggest profits are made from what the casual observer would call "waste materials." In the same way the management of communities of people—in other words, cities—must be looked upon as a big commercial enterprise, and from a multitude of little waste products is the profit, or the return to the ratepayer, to be made. One of these by-products, at present but little used, is the opportunity for the advancement of medical education—and so indirectly for the promotion of the better health of the citizens—that exists in our infirmaries.

THE MEDICAL WORK OF INFIRMARIES.

Most Union infirmaries, both in London and in the big provincial centres, contain from 250 to 800 beds, and are staffed by a resident superintendent and one or two assistant medical officers. It is difficult to speak collectively of all, for the class of cases they receive varies considerably with

the geographical position of the Union. For instance, an infirmary within the four-mile radius of London, and close to a large hospital, will probably not get the accidents and acute work that will come to an outlying institution, which has to take on the duties of a general hospital in addition to its own. But even in the more central infirmaries there is a wealth of material in the shape of interesting clinical cases that is seldom realised by members of the profession who have not come into actual contact with them. One is too apt to think that the patients in an infirmary consist of two classes only—those that are incurable and have been transported from the hospitals merely to die, and those that are sent across from the workhouse with the simple diagnosis "Senectus" written on their cards. This is very erroneous. Take the average infirmary of 500 beds. There is, say, a resident superintendent, and he has two resident assistant officers. The superintendent may be either a man of administrative capabilities who confines himself almost entirely to that sphere (when he will quite earn his salary, for there is a vast amount of work in the administration of a large infirmary), or interested in his purely professional work and he may take a large share in the medical attendance on the patients. Occasionally, by dint of herculean labours, he may satisfactorily fulfil both duties of his post.

The two assistant officers usually divide the beds equally between them. Supposing there are 400 patients, there will thus be 200 patients to each assistant medical officer provided, as is usually the case that all the beds are occupied. Allowing the hours of morning work to be from 9.30 to 1.30 o'clock (and it is to be continuous work, with no rests in between), he will be able to devote to each patient under his care the lengthy time of one and one-fifth minute! And during his round he will probably have to dress a number of surgical cases, perform one or more minor operations, and undertake catheter, ophthalmoscopic and laryngoscopic work, not to speak of the administration of anæsthetics in conjunction with his colleagues. In fact, it is often far into the afternoon before he is able to finish even the routine work. How can he find time properly to go over his chest and nervous cases, or his gynaecological examinations? All the afternoon one of the assistant medical officers will have to be on duty, admitting and examining fresh cases, while the other gets an opportunity for fresh air and exercise. In the evening there is the night round to do, and casual admittances are coming up at intervals throughout the day. At night there are often obstetric cases, not infrequently "difficult labours," sent in by the parish doctor, for which the medical officers will have to be called up. With such a time-table as this the more scientific aspects of medical work such as bacteriological examinations, blood-counts, delicate urinary analyses, etc., can seldom be undertaken.

Here, then, is a harvest of clinical work, and reaped only by two or three medical men, and even by them, through pressure of time, not to its fullest advantage. When one finds there are no fewer than 18,000 *beds* in the infirmaries of London alone, one begins to realise what a large field for medical work is here waiting.

So far I have not yet mentioned the operative surgical work carried on in an infirmary, and about this also mistaken notions are current. I once heard a medical man say, "You surely don't have operating-theatres in an infirmary. I thought that all cases requiring operation had to go to the nearest hospital." Far from it. Practically all the infirmaries under the Local Government Board, especially those in London, are fitted up with first-class theatres, and with all the latest equipment necessary for carrying on the surgical work of the institution. Operations are usually performed by the superintendent, who is nearly always an experienced surgeon, and occasionally even takes a high place among the operating surgeons of the Metropolis. One of the assistant medical officers gives the anæsthetic and the other acts as surgical assistant. From the official books of one of the London infirmaries I find that during the last three months there have been over 150 operations performed; of which 23 were "abdominals," including two perforated gastric ulcers and an obturator hernia; seven were urinary cases, as lithotomies, urethrotomies, prostatectomies, etc.; one or two eye operations, seven mastoids, and a cephalotripsy—a record that could surely hold its own with many of the smaller non-teaching general hospitals.

A SCHEME TO UTILISE THEIR CLINICAL MATERIAL.

But though there is all this surgical work to be seen, yet I do not think that surgery is the most valuable part of the infirmary work from the point of view of medical education. Surgical operations can, after all, be best seen and appreciated at the large teaching hospitals, where the greatest surgeons of the world make it their duty to instruct students in their art. Surgery is the essence of the hospitals, and to the major operations (and in medicine, the obscure diseases) the student gives his mind when he is reading for his "Final." How many students learn anything about *treatment* while still at the hospital? They see in the wards cases of this and that disease, and on the operating-table operations which are recorded in the journals for their rarity; but how many students when first qualified can treat a case of simple asthma or properly operate for tonsils and adenoids? These are the things they require as general practitioners, and it is to general practice that nine-tenths of them ultimately turn. Of course, if a student is lucky enough to get a house appointment after qualifying, so much the better for him; but students are many, and house appointments few. Can we, then, see in our Poor-law infirmaries a first glimpse of the axiom laid down by old Pepys, "A worthy thing, and of use, and will save money"? Can any scheme be made workable that will turn the clinical cases to be seen in the infirmaries to advantage as

seen in the infirmaries to advantage as a means of medical training and education?

In the first place, there must be no revolutionary methods, for any scheme that may be evolved in a few minutes of thought and set in motion with perhaps not more consideration, is bound to fail in the end. It is only after a plan has been weighed and tried and deliberated upon from all points of view, and then gradually and slowly brought into being, that it can ever show its true value. Newly qualified students obviously cannot become superintendents or assistant medical officers, for even the assistant medical officers are practically in full charge of their patients, and have to have that experience which is necessary to give the self-reliance needed on critical occasions. When the superintendent is away there are no "honoraries" for them to fall back upon as a house-surgeon may do in a hospital. They have themselves been all through the routine of the various hospital appointments and are men who have settled down to the service of the Local Government Board. Moreover, a scheme is required whereby a considerable number of students may benefit by the practical teaching offered by an infirmary.

RESIDENT CLINICAL ASSISTANTSHIPS.

Now, the Metropolitan Asylums Board have recently instituted at their fever hospitals an innovation which is of great value—namely, the appointment of resident clinical assistants for short periods of three months each. The authorities at these hospitals have officially recognised what has long been understood in general hospitals, that students can get but a superficial knowledge of their work by casually going round the wards for an hour or two each week, and that a real knowledge of the practical side of their profession can only be gained by a resident appointment. Could this arrangement be applied in any way to the Poor-law infirmaries?

Here there is a splendid field of clinical material, and of just the sort that is required for the best training of a medical man, the ordinary everyday ailments that occur in general practice. One might say, "Why not throw the infirmaries open straight away to student ward-classes, as carried on at the hospitals?" But this is too drastic a change, and would mean a complete upheaval of the present state of things, and a disorganisation which would hardly repay any possible benefits that might be obtained.

In the first place, if the infirmaries became ordinary teaching institutions, on exactly the same lines as the hospitals, would there be enough students to justify such an innovation? In a few schools, it is true, there are far too many students to give them a fair chance of bedside work; but for the most part there is usually enough clinical material in the hospitals for education as regards ward-classes and operations. What students require is *practical* knowledge—to be able to treat the patients at first-hand, and to know what to do in the various emergencies that continually confront a house-surgeon. And this knowledge they would be able to acquire if for a short time they could become resident clinical assistants.

RESIDENT MEDICAL OFFICERS' DEPARTMENT.

INTRODUCTORY.

THE point of view of the resident medical officers to our hospitals is one which is not usually considered in the medical press. There is a tendency to regard those who hold responsible house appointments as being still *in statu pupillari*, and their opinions as being prejudiced and immature. The interests and welfare of this section of medical men do not receive at the hands of professional journals so much attention as they deserve.

In nearly every instance of conflict between general practitioner and hospital resident, the bias of medical journalism has been strongly in favour of the former. But we are convinced that this attitude is a wrong one, and prejudicial to the best interests of the profession. The point of view of the hospital resident can not only be made interesting and instructive to his seniors in general practice, but it is one which, if properly represented, will be of service in solving some of the problems which are continually before us. As an example may be mentioned the problem of the abuse of charity and the excessive free relief at our hospitals; this is dealt with in the following article.

In organising a resident medical officers' section in this paper we believe that we shall be doing a service to the profession. The interests of the house surgeon and of the general practitioner are really one; the gap between them is more artificial than real, and it will be the aim of this column to bring into closer touch these two branches of medical

practice. Practitioners who have held hospital appointments in the past may find something of interest and of profit in the affairs and opinions of those who now fill the posts which they themselves formerly filled. Furthermore, many of these young men are soon to become their assistants, their partners, or, it may be, their professional opponents. The mental attitude and the characteristics of the present generation of hospital residents are, therefore, worthy of sympathetic attention.

Finally, this section should appeal strongly to those who are now holding hospital appointments. It is intended to represent their interests, to open to discussion the problems of the hospital from within, and to afford a means of communication between the various members of their own branch of the profession. The work of the house physician and the house surgeon is naturally, and rightly, of absorbing interest to themselves. They will find in this column articles on the subjects which intimately concern them, written by those who are not only in sympathy with their point of view, but are also in immediate touch with their own work.

Combined action between resident medical officers throughout the kingdom will strengthen their position and widen their outlook; while co-operation between resident medical officers and the great body of general practitioners will help to remedy many of the abuses which now mock the progress of medicine.

HOSPITAL RESIDENTS AND HOSPITAL ABUSE.

SCARCELY a number of any of the leading medical papers appears without some reference to the question of hospital abuse. Distant echoes of this controversy are now and then to be heard in the columns of the lay press; but the educated public really takes little interest in a problem which it appears to regard as beyond its province, and of practical interest only to the medical profession. The resident staffs of our London hospitals have at present a tendency to regard this important question from a similarly detached and selfish standpoint. Not being themselves immediately concerned with the evil consequences of this excessive free treatment, they close their eyes to what is going on, and excuse themselves for their inactivity by a protestation that, from the nature of their office, they are powerless to help. It is true that some few of their number do now and then consider the riotous waste of charity that surrounds them. But they receive little encouragement, either from the

results of their single-handed and occasional efforts, or from the attitude of the hospital authorities to whom they are responsible. And their colleagues usually shrug their shoulders and regard any action on their part as little better than tilting at wind-mills.

All this is, of course, utterly wrong. Isolated efforts are certainly useless; but united action by the resident medical officers of all the hospitals of London can, and will, supply almost the only practicable solution of the problem of the abuse of charity. When once this is realised and acted upon, there will be little need for all this discussion and vituperation in the medical press.

In nearly every hospital of importance there is an almoner or inspector—at any rate, an official of some sort—whose duty it is to scrutinise every applicant for out-patient treatment and to inquire into his means and circumstances. In some cases this is efficiently carried out; in others it

is a perfunctory business, almost approaching to a farce—a stereotyped question, a lying or evasive answer, and no further inquiries. Where the inspector is conscientious and exacting, the co-operation of the casualty officers and resident staff is all that is needed for the sorting out of the sheep from the goats, and the proper administration of the charity. But in hospitals in which the almoner is slovenly, unobservant, or weak-minded, resolute action on the part of the medical officers forms the only safeguard against excessive and unjustifiable free relief.

If the resident staff of a hospital realise that, in treating out-patients whose incomes enable them to consult a private doctor, they are defrauding the general practitioner and pauperising the patient, their attitude towards this class of person will at least be one of hostility. If they further realise that in actually refusing to treat such patients—except in cases of emergency, or where a card is brought from the medical attendant—they will be supported by their colleagues and by the rest of the profession, they will soon bring these parasites to a proper state of mind, and will eventually force their legitimate views upon the weaker members of the governing body of their hospital.

At the present time it needs some little courage for a house physician, say, to refuse treatment to an able-bodied mechanic, earning £2 or £3 a week, who “isn’t satisfied” with his doctor’s treatment of his cough or his back-ache. If he has not to face the house committee for thus overstepping the bounds of his duties, he is certain of the mortification of knowing that his would-be patient will be more successful in obtaining treatment and advice at the next hospital to which he chooses to apply.

Generally speaking, the medical officer has better opportunities for gauging the real means of his patients than has the official almoner at the door. The patient’s clothing, as he strips for examination, his unguarded answers to astute questions, his speech and his manner, all give indications of the real state of his income. Genuine poverty has a hall-mark which even the freshest of house-surgeons can appreciate.

The worst offenders are usually those who arrive at the hospital doors during the afternoon and at odd times. They are too wary to come during regular casualty hours. They are thus beyond the reach of the official inspector, and their treatment or dismissal lies entirely in the hands of the medical officer on duty. Plausible as their stories often are, there is generally something about them which gives the lie to their statements. Some of them even come long distances from the country without the knowledge of their regular medical attendants, under the mistaken idea that a London hospital is the proper place to apply for a gratuitous and illicit second opinion.

The resident officers of all great hospitals will find that the little extra time and trouble which a critical attitude towards this class of patient entails will be amply repaid. Apart from the knowledge that they are furthering the proper administration of charity, they will have more leisure for the careful and profitable investigation of deserving

cases, and they will have the satisfaction of knowing that they are helping those members of their profession whose incomes depend upon the ailments of the lower classes.

A resolute front towards hospital abuse is quite possible. The writer of this article himself adopted it persistently, so far as he could, for many months, and with little addition to his ordinary duties, as a member of the junior staff of two of the larger London hospitals. But he realised that—save as an experiment and as an example—this course of action was of very little use, for lack of support from his own colleagues and from the residents in other hospitals.

The question of in-patients who receive free treatment—operative, medicinal, nursing, and dietetic—and who make absolutely no return to the hospital which does all this for them, is beyond the scope of the present article. But it deserves equally close attention from resident medical officers: for the remedy for this abuse also lies mainly in their hands. This subject will be dealt with in a subsequent issue, and the methods of applying the remedy will be indicated and discussed. In the meantime it is hoped that hospital residents will take the whole subject of the abuse of charity seriously to heart; not only as it affects themselves now and in the future, but also in its widest sociological aspects, as becomes the members of a learned and enlightened profession.

NOTES, QUESTIONS, AND COMMENTS.

THE editor of the Resident Medical Officers’ Department of *THE HOSPITAL* invites contributions to this column both from resident medical officers and from other members of the profession. Short articles, notes, queries, or suggestions bearing upon this branch of medical practice will always receive careful consideration, and those that are suitable will be published in due course. Correspondence, short and to the point, is particularly invited, as by this means the value of the R.M.O. Department will be greatly increased.

Articles, whether in the form of letters to the editor or otherwise, should in no case exceed 600 words in length, and should, if possible, be shorter than this. Postcards with short notes, questions, or notifications of recent hospital appointments will be welcomed.

All communications for this column must be guaranteed by the name of the writer, which will not be published unless he expressly wishes it, and should bear the words “R.M.O. Department” on the envelope or the address side of the postcard.

Items of news from the resident officers’ quarters of the principal hospitals, infirmaries, and asylums throughout the kingdom are invited, and, when of sufficient general interest, will be published.

The editor will also be pleased to receive and reply to confidential communications from resident medical officers and to consider any suggestions that may be made for the improvement of this department of *THE HOSPITAL*.

Brief notes and comments on new methods of diagnosis and treatment which are under trial in hospitals and are likely to be of practical use to readers will be especially welcome; and we shall be glad to receive questions or comments bearing on these subjects both from general practitioners and from R.M. officers.

MENTAL DISEASE AND MENTAL DEATH.

IS THE PRESENT ASYLUM SYSTEM A FAILURE?

I. THE EXISTING POSITION.

INSANITY occupies a very special and peculiar position in medical practice. It is only during the last few years that it has had a position in the medical curriculum, so that the vast majority of the older practitioners have had no opportunity whatever of acquiring a systematic knowledge of it. Since the study of insanity has been compulsory on medical students, the number and urgency of other claims have been so great that the time given to the study of insanity has been so short, and the opportunities of seeing cases so limited, as to render possible only the merest smattering of knowledge of the subject. Though insanity is by general consent one of the most pitiable and dreadful of maladies, and though its study is perhaps the most difficult subject to which the mind of man can be addressed, yet it occupies the most insignificant position in the medical curriculum. This fact is not adduced in any way as a reproach to those who regulate and apportion the curriculum. Other factors must be considered by them beyond the terrible character of a disease and the difficulties that its study present. They must take into account also the frequency or rarity of a disease. It would be manifestly disproportionate to allot as much of the student's time to the study of Addison's disease or of insular sclerosis as to that of the treatment of wounds or the complications of labour. Insanity is a terrible malady, it is true, but it is comparatively rare. A medical man in a very large practice may not see one case among his private patients in a year. For this reason the deficiency of his hospital training is not, in this department, compensated by his opportunities in after life. To the great majority of medical practitioners insanity remains as foreign to their experience and knowledge as beriberi or guinea worm; so that when they are called upon to deal with a case they are sorely put to it to know how to act; they are obliged to call in outside assistance, and they have not even that modicum of knowledge which should enable them to appraise the quality of the assistance on which they rely. Another unfortunate consequence of the general lack of knowledge, not only among medical practitioners, but also among the public at large, is the under-estimation, or even the non-recognition, of the signs of insanity in its early stages and in its slighter manifestations.

When a case of insanity is recognised as such, the difficulty of deciding how it ought to be dealt with is often very great. In the great majority of cases it soon becomes manifest that the patient cannot remain at home. He needs control, safeguarding, or skilled treatment. Whither is the patient to be removed?

The answer to this question must depend on various considerations, the chief of which are the means of the patient and the view taken by the consultant, for in almost every case, not being a pauper case, the services of a consultant are in-

voked. It happens so very often that the consultant is a neurologist, and has had no special experience of insanity, the alternatives placed before the patient and his friends are usually three—a sea voyage, a nursing home, or residence in the house of a doctor. To these is sometimes added the expedient of travelling on land with an attendant, medical or non-medical. All these methods accomplish very effectually the aim of getting the patient removed from his home. That is in many cases a great relief to the friends; but it is not of itself a curative measure. If he were left to himself he would in many cases attain the same end in order to satisfy his wandering or other propensities. On shipboard the circumstances are not such as we should *prima facie* expect to be very beneficial to a case of incipient insanity, especially to a case of mental depression, and it is for such cases that this course is usually advised. Life on board ship is, by its monotony and want of interest, in itself depressing to many travellers, and it is rarely that a ship's doctor has had any more experience of insanity than other general practitioners. We see frequent evidences of the non-success of this mode of treatment in the newspaper paragraphs which chronicle the accidents of persons when taking sea voyages for their health.

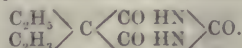
Nursing homes do not offer the same daily and hourly temptations to suicide that are furnished by a sea voyage; but nursing homes are not equipped in the very exceptional manner that has to be followed in institutions for the insane, their staff is not accustomed to deal with the insane, and the result of sending cases of mental disease to nursing homes is not such as to encourage the practice.

All that has been said of nursing homes applies to a majority of those doctors who receive mental cases in single care. In many instances the home is luxurious, the host kind and attentive, his wife perhaps a trained nurse; he has pleasant grounds and a carriage for the use of his patient; but he has had little or no experience of mental disorder, and would himself admit that he is not competent, nor his house adapted, for the reception and treatment of a case of much severity. He is not skilled in the observation and detection of ominous symptoms, and his house is more a place of rest and recreation for an overwrought person than a place of treatment for a case of mental disease. There are many cases of slight mental disorder that are suited for private care in the house of a medical man, but very many cases that are most unsuitable for such care are sent into the private care of medical and non-medical men and women as single patients under certificates, or, much more often, without certificates, although they might easily be, and ought to be, certificated. The very large number of cases so cared for is a great scandal. If the law is unjust and detrimental to the welfare of the persons whom it purports to protect, it should be altered; but as long as it exists, it is surely improper that it should be frequently evaded and nullified.

REMEDIES AND THEIR USES.

Veronal.

This body belongs to the now rather extensive class of synthetic preparations derived from urea, and it is not a little curious that the advance of science should have placed bodies of an excrementitious nature again on the list of remedial agents, whence they had been so long excluded. Veronal is di-ethyl-malonyl-urea, or diethyl barbituric acid



and is a white crystalline powder, of slightly bitter taste, soluble in 145 parts of water at ordinary temperatures, and in 12 parts of boiling water. It is not very soluble in cold alcohol or in chloroform, but is easily soluble in hot alcohol and ether. It is chemically a fairly stable resistant substance, and is not easily decomposed. Physiologically, experiment has shown that veronal is by no means a highly toxic substance; it has no action on the blood corpuscles or hæmoglobin, and may be injected intravenously in solution. When given in solid form to warm-blooded animals by the mouth, it is fairly rapidly dissolved in the alkaline intestinal contents and is absorbed, but the action is not so powerful as when a solution is given in the first instance. It is excreted fairly rapidly in the urine, by far the major part without chemical change. Large, toxic doses cause depression of the higher centres and collapse; traces of albumen appear in the urine, and in cases of chronic poisoning there is considerable loss of weight.

For the rest, the important points in the pharmacology of veronal are: (1) it has no action on the heart or blood vessels, and may thus be safely given in cardiac disease; (2) although it is a diuretic, this property is not marked when the drug is given in ordinary medicinal doses; it has no irritative action on the kidneys; (3) it is said to have some slight power of sparing proteid, and would thus be useful in wasting diseases; (4) its comparatively slow absorption and easy elimination render the risk of toxic symptoms from an overdose slight and unimportant.

Veronal is given usually in doses of 8-12 grains, though smaller doses (4 or 5 grains) may be enough. It is best given dissolved in hot milk, tea, or alcohol. The sleep produced by veronal is very like natural sleep; it may be expected from half an hour to an hour after the administration of the drug, and lasts several hours. According to the experience of all observers, veronal is most successful in cases of simple insomnia not accompanied by actual pain, or at any rate not accompanied by pain of any severe type. In various mental disorders, melancholia mania, dementia, paranoia, it has been largely and successfully employed; in epileptic and hysterical conditions it is of value, and also in neurasthenia and hypochondriasis. In the treatment of morphinism and alcoholism it will be found efficacious even for bad cases, as also for delirium tremens, the insomnia of pyrexia, and for severe hysteria and epilepsy; doses of 15-25 grains may be required.

Subacute uræmia and dyspepsia may also be safely treated with veronal, owing to its non-irritant nature.

It may also be given to children, to which class of patients its comparatively slight taste will recommend it. Infants can take $\frac{2}{3}$ -1½ grains once or twice a day.

Veronal may be given combined with antipyrin, which is well tolerated by children, as a remedy for whooping cough. The following formula is recommended:

| | | | | | |
|----------------|-----|-----|-----|-----|--------|
| Veronal | ... | ... | ... | ... | gr. 15 |
| Antipyrin | ... | ... | ... | ... | gr. 15 |
| Syr. zingiber. | ... | ... | ... | ... | 3j. |
| Aq. ad | ... | ... | ... | ... | 3iv. |

F.M.

Sig.: One teaspoonful four times daily.

With older children (above three years) more veronal may be given (up to 30-35 grains). If necessary, veronal may be given as an enema, as it is easily dissolved and readily absorbed from the intestine.

In severe cough and intense pain veronal fails to act, and in certain cases of arteriosclerosis, also in old people its action is occasionally much delayed. In chronic cases of insomnia a slight cumulative action has been noticed, so that it is not necessary to give it every night. In the night sweats of phthisis, owing to the slight diuretic action, veronal is said to be extremely useful. Doses as small as 5 grains may be efficacious, but the effect will not be noted for a night or two.

In cases where there is much pain some anodyne preparation, not in itself a hypnotic, may be combined with veronal. Aspirin in doses of 10-15 grains may be used, or methyl atropine bromide ($\frac{1}{16}$ grain) may thus be employed.

Idiosyncrasy against veronal does not appear to be common. The following symptoms have, however, been noted: giddiness, mental confusion, vomiting, scarlatiniiform or morbilliform rashes, marked diuresis. A single large dose of 45 grains taken by an hysterical girl produced deep sleep with convulsions and feeble cardiac action, requiring stimulants. Under the second heading may be mentioned one fatal case in which half-an-ounce was consumed in about forty-eight hours. In another case in which severe symptoms occurred the patient (a lunatic) eventually recovered. She appears to have taken a dose of 9 grams (135 grains), apparently in the solid form. She became comatose in the afternoon, and her stomach was washed out. She remained comatose until the third day, when she was merely very drowsy; on the fourth day her mind was clear. The other symptoms were slight stertor, general relaxation of the muscles, with occasional convulsions resembling those of tetanus but much slower, and a bullous eruption. The pulse and respiration remained good, but later on the latter became very superficial; the reflexes were practically unaffected. There was some opisthotomes.

THE BOOK WORLD OF MEDICINE AND SCIENCE.

STRAY NOTES.

When a paper starts on its career, or when it broadens its old road and extends it so as to reach to farther fields, it is permissible for it to give its readers a

A Foreword.

brief outline of its intentions. This section of *THE HOSPITAL* is, in a sense, a new departure, and one which we trust will be found acceptable to our readers. Its aim is, in brief, to bring to the notice of the practitioner the leading points in the literary history of the week. In the rush of the day's work few of us have time, or inclination, to find out for ourselves what books are worth reading, to discriminate between that volume which gives momentary pleasure and that which makes a man the richer for having read it. We need a guide, or a sign-post to show us the way, and it is desirable that the guide should not be prolix, nor the sign-post overloaded with directions. To that end this section has been designed. It will endeavour to give, weekly, a summary of such books as may reasonably be expected to interest the general practitioner, and of literary articles appearing in the periodicals which may have a bearing on the doctor's work. And in considering what will affect us, as medical men, our range will be catholic and not purely official. "Man is more than constitutions," and it will be the aim of this section to deal, succinctly, though of necessity, briefly, not only with purely medical works, but with books which lie outside the circle of professional literature, and which, for that reason, are so often neglected in the scientific press. We appeal to readers to help us in striving to make the section as complete as possible. Suggestions for its improvement, criticisms of its shortcomings, and exposure of its defects will always be welcomed by the editor, and will help to make the section what we desire it to become, namely, a helpful and useful epitome of the week's literary ventures.

In the current number of the *Dietetic and Hygienic Gazette*, Dr. Wainwright continues his articles on the medical and surgical knowledge of Shakespeare.

The Medical Aspects of Shakespeare.

Someone has said that either in the Bible or in Shakespeare one can find a text for everything, and Dr. Wainwright shows that at any rate the great dramatist can furnish headings for medical essays. Still, we are surprised to find that he only credits his author with four anatomical matters—pia mater, artery, hair, and liver. A Shakespeare student would be able to add a good many others to the list. As proof of the fact that the dramatist knew of the circulation of the blood, Dr. Wainwright quotes Brutus in "Julius Cæsar," and from the fifth scene in the first act of "Hamlet." He might have added Menenius' speech as an even better argument, not of the fact that Shakespeare anticipated Harvey, but that the dramatist had probably read Frascatorius' poems. Many of the quotations adduced to show the dramatist's knowledge of the physiological functions of the body are certainly very striking, and the article is a valuable contribution to the study of the many-sidedness of the author of "Coriolanus."

In "The Strange Case of Dr. Bruno" Dr. Daniel has attempted to write a romance on a particularly gruesome subject. Moreover, he has contrived to

Anticipations.

imbue his writing with a fascination that will find him many readers—and perhaps a few adherents. His hero is a medical man who is keenly alive to the benefits to be obtained from experimenting on animals, and who has the courage to suggest that vivisection is as legitimate a means of obtaining knowledge when practised on human beings as

on animals. Dr. Bruno wishes to experiment on convicted criminals, and deplors the loss which science suffers owing to the "useless execution of condemned murderers." He asks, reasonably enough from his point of view, "why not subject these creatures to experimental studies on the internal organs to solve the problems of immunity, fermentation, and glandular action?" As society refuses to listen to him, he starts experimenting on himself. He studies sleep, and decides to put himself in a trance for six months. Interwoven with all this is his life-story—a tale of miserable, tragic failure and pitiful deception. After his trance he awakes—only to die from the effects of his experiment. The book is not a masterpiece, but it "gives to think," and probably that was the main object its author had in view when he penned it. It is published by the Guarantee Publishing Company, New York.

The April magazines do not offer much that is of medical, or even semi-medical interest. But there are a few noteworthy exceptions. In *Chambers's Journal* an anonymous writer discusses "Doc-

Some Magazines of the Month.

tors, Old and New," in a chatty and informative article, which well repays its reading. It bristles with anecdotes, many of which will, however, be well known to most medical men. One citation of a story which we do not recollect having seen in a popular magazine, must suffice. "Caesar Hawkins, when in company with Robert Lee, who had kicked a bit of orange-peel from the pavement to the roadway, replaced it with the words, 'What are you thinking about?'" This sly hit at the expense of the profession was originally told at the expense of Cheselden. There are a few errors of fact in the article, but on the whole it is an extremely well-written anecdotal sketch of old and new medicos. In the *Royal Magazine* a K.C. describes his day's work, which appears to be almost, if not quite, as laborious as that of a general practitioner. In the *English Illustrated* Mr. Sidney Hunt gives an interesting pen-picture of some old English homes, most of them associated with historical events. The *Fortnightly* is an unusually interesting number. Professor Turner's article on "Man's Place in the Universe" is an able contribution to the discussion initiated by Dr. Wallace, and Mr. Minchin's study of Fielding will appeal to lovers of "Tom Jones." The *Grand* has three items which demand notice. One is Mr. Thomas' three-verse narration of how he cheated the doctor by waking the latter in the middle of the night to attend what he made out to be an urgent case at a far-off cottage. The doctor went in his carriage, only to find that he had been hoaxed, for the story ends as follows:—

Here's your ten and sixpence, doctor,
It's a good long way from town—
And I couldn't find a hansom
Under twenty shillings down."

Dr. Bell writes on "A Medical Conundrum," and pleads vigorously for fresh air and less coddling. Dr. Sebroff contributes a paper on "Delusions," describing some interesting cases he has met with. The *Badminton* has two informative articles on out-of-the-way hunting grounds—stag-hunting on the Campagna, and wild-fowling in Burma. *C. B. Fry's* devotes several pages to "Hints on Housing a Cycle," from which the cyclist may derive much useful information, and further on gives a paper on "Points to Study in Choosing a Motor-car Body," which the intending motorist will do well to study. In the same number is an interesting article on old Inter-University boat crews. From it we learn that by far the majority of them became clergymen or lawyers: Only two of the Cambridge men became doctors, while but four of the Oxford blues finally landed in medical practice.

BOOK WORLD—continued.

A LIBRARY OF PROBLEMS.*

SOME time ago Messrs. Methuen and Company started, under the general editorship of Dr. C. Saleeby, the publication of a series of volumes entitled "The New Library of Medicine." These volumes were planned "on the assumption that there are certain matters of the very gravest importance which urgently claim the attention and appreciation not only of the medical man, but also of the layman." Written on that assumption—one which we are of opinion is perfectly warranted by facts—these works, of which the two cited above are the most recent, form essentially a library of problems—problems that should appeal to everyone, no matter whether layman or practitioner. Broad questions of vital importance are the subjects with which they deal, and the men who are responsible for them are authorities whose opinions, whether acceptable or otherwise, are at least worthy of thoughtful respect. In a sense, the aim of the originators of the series is a very high one. It is to bring home to the great mass of the reading public the grave aspects of certain subjects which have a marked relation to our personal and national life. Primarily, therefore, it purports to be an educative series. It is designed to instruct and to enlighten, and bearing this in mind, one can overlook a certain amount of dogmatic *ex cathedra* speaking which would otherwise jar upon the reader. Of necessity such a series must be controversial in many respects, but a careful scrutiny of the volumes which have so far been issued, leads one to the conclusion that the several writers have, as much as possible, stifled the personal note in an honest attempt to throw light on the problems with which they deal. The volumes are uniform in size and shape, clearly printed, and neatly bound in red cloth. Each has a respectable look, such as, indeed, we are accustomed to look for in the works which emanate from the well-known Essex Street publishing house. Issued at the moderate price of 7s. 6d. each net, they are well within the reach of everyone, and offer a variety of subjects from which everyone can choose to his own satisfaction. The volumes which have already appeared are "Infant Mortality," by Dr. Newham; "The Hygiene of Mind," an eminently thoughtful work from the pen of Dr. Clouston, of Edinburgh; "The Children of the Nation," in which Sir John Gorst takes for his text the danger of neglecting the health of the nation's children; and the two volumes with which we here deal more fully. In preparation are "The Care of the Body," "Diseases of Occupation," "The Hygienics of Education," "The Prevention of Tuberculosis," "Nutrition," "Drugs and Drug Habits," "Air and Health," "Functional Nerve Diseases," "Mentally Defective Children," "Serum Therapy," "The Insane," "Heredity," "Infection," and "Imperial Hygiene." The list shows how widely Dr. Saleeby has interpreted the meaning of "personal and national importance," and how exhaustively he has attempted to deal with the main subjects. In "The Control of a Scourge" Mr. Childe sets himself the difficult task of dealing with the problem of cancer. After reviewing, in a style which is perhaps more popular than strictly scientific, the many theories concerning the disease, he goes on to deal with the clinical aspects of cancer, and finally to point out lucidly the lines upon which it may be combated. In an interesting chapter he shows the failure of the many so-called cures—Christian science, x-rays, high-frequency

currents, cancrin, violet leaves, molasses, trypsin, Otto Schmidt's method, and the host of other means of treatment which have been advocated. Practically, he pins his faith to the teaching that early and radical operation is the only hope of eliminating the disease. In this he will be supported by every thinking man who has had even a moderate experience of cancer cases. His whole book is an eloquent appeal for the education of the laity—an appeal that THE HOSPITAL, on more than one occasion, has voiced in no half-hearted fashion. By teaching the public the danger signals, by showing them that their only hope of relief is to seek the surgeon's aid at the first sign of the disease, and by overcoming their morbid dread of operation except as a last resource—it is by these paths, Mr. Childe points out, that the ultimate goal of success may be reached. To such suggestions some of us will reply that inadequate instruction in medical matters is worse than none. There is no quotation more often misapplied than "Drink deep or taste not," and for the arguments against it in reference to this subject, the reader may safely be referred to Mr. Childe himself, whose earnest and temperate *résumé* of the pros and cons of the case is eminently worthy of an equally earnest and temperate consideration.

More debateable, because involving broader issues, is "The Drink Problem," in which fourteen medical authorities discuss the medico-legal and medico-sociological aspects of alcoholism. There are many points, in reading this book, with which we find ourselves in agreement with the writers, but there are as many upon which we must join issue with them. The purely scientific chapters—among which Professor Sims Woodhead's synopsis of the pathology of alcoholism, and Dr. Hyslop's account of alcoholism and mental disease, are worthy of special mention—may be dismissed with a few words. They are instructive contributions to the medical literature of a subject which has already been fully treated. But the more general chapters demand a word of further comment. Most of us will be fully with Dr. Crowley in ascribing the large increase in pauperism to alcoholism, but how many will cordially agree with Dr. Jones that intoxicating drink is the main factor in national deterioration? The optimist may be pardoned for questioning if national deterioration has been proved, at any rate in a strictly scientific sense. We want more statistics, more facts, and more figures before an adequate reply can be given. So, too, when we come to the alleged increase in the consumption of alcoholic liquors, it appears to us that the authors have not made out a clear case that there is a definite increase. That alcohol is a factor in the evolution of the criminal we are all prepared to admit; that it is a daily increasing factor in causing a break-down in women, as Mrs. Scharlieb would have us believe, we may also admit. But that alcoholism is a greater factor in the evolution of the criminal to-day than it was fifty years ago, and that the economic evolution of the woman worker has tended to produce more intemperance, are propositions to which we are by no means prepared to subscribe. In the final chapter, Dr. Kelynack deals with the "Arrest of Alcoholism," and suggests measures for dealing with the problem. These we do not propose to discuss, beyond saying that they appear to us to stop short of the radical measures proposed by Dr. Archdall Reid in his well-known book published some years ago.

The thoughtful reader will find much food for reflection in both these volumes, and the very fact that both of them are open to discussion makes them more interesting, and therefore more valuable. Both are short, easily read, and, to the medical practitioner at least, both should prove of service.

* "The Control of a Scourge." By Charles P. Childe, B.A., F.R.C.S.

"The Drink Problem in its Medico-sociological Aspects." By Fourteen Medical Authorities. Edited by T. Kelynack, M.D., M.R.C.P. Methuen and Co. 7s. 6d. each net.

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

THE ENTRANCE TO A GENERAL HOSPITAL.

I. THE GATE HOUSE OR ADMISSION BLOCK.

ITS PLAN AND CONSTRUCTION.

If the efficiency of a hospital, and the regular smooth working of its departments, are to be secured, the proper management and control of the admission department is of the greatest importance. When one considers for a moment the number of applicants of all ages in various stages of disease, and the number of accident cases of every degree of severity who present themselves every day seeking admission, it will be evident that the most careful supervision must be exercised on the very threshold. It is essential that every precaution be taken against the admission of an unsuitable case, or the refusal, without careful examination, of any patient seeking admission. It is only necessary to instance the case of a patient with delirium tremens being admitted to a general ward at a late hour, or a case of infectious disease admitted through an overlook, or a case refused admission and expiring on the way home, in order to illustrate the danger and trouble which might arise should the supervision exercised over this department not be systematic, stringent, and thorough.

To secure this proper control it is necessary that the admission department should be designed on a definite plan suitable for the purposes in view. It is not sufficient to utilise any available rooms, say, in the basement of the building, where patients may be casually interviewed by a house surgeon or physician. This department should be as carefully designed and equipped as any other department of the hospital.

Within recent years much more attention has been devoted to the details of construction of this department than was formerly considered necessary, but even in the best type of hospital there is still much to be desired in this respect. It is essential for an architect in designing any building to have before him an accurate idea of all the requirements, and the uses to which each foot of space is to be put; for unless he is furnished with this information it is not possible for him to design his building so as to give effect to all the details which are so necessary. I will endeavour in a general way to enumerate the various points which an architect should have before him in designing the admission department of a general hospital.

The admission department should be conveniently placed on the ground floor of the hospital—or it may be a detached building—with a large court where ambulance wagons or other vehicles may easily pass each other on approaching or retiring from the institution. The entrance to the admission department for patients should, if possible, be

entirely separate and distinct from that for the staff and students. An additional entrance should be provided for patients' friends on visiting days, in order that they may be able to enter the hospital without passing through the patients' entrance, or coming into contact with an accident case or other patient seeking admission. The main entrance door should be protected by a covered porch so that patients may be removed from the ambulance or cab to the examination room without being exposed to the weather or the gaze of inquisitive onlookers. This door should be sufficiently wide to allow two hand ambulances or barrows to pass should they require to be brought out to the ambulance or cab, and to facilitate this the floor of the entrance hall should be as nearly as possible on a level with that of the outside porch. Adjoining the entrance vestibule, lavatory accommodation should be provided for males and females who may accompany the patient. Lavatory accommodation should also be provided for porters on duty, and all lavatories should have a cut-off ventilating passage.

A recess to store ambulance barrows should adjoin the entrance, and this recess must be in proportion to the size of the hospital, in order that a hand ambulance may always be available when an accident or urgent case arrives. The vestibule should lead into a large waiting hall with an inquiry office at its entrance, provided with a telephone exchange, private exchange box, also letter and parcel racks. If possible a window of the inquiry office should command a view of the main entrance. A room should be provided for the medical officer on duty, so that a medical officer may be always at hand and that no delay will occur in attending to a patient on arrival.

Leading off from this waiting hall, well-lit examination rooms should be available for the thorough examination of patients, both male and female, the number of rooms, of course, varying with the size of the hospital and the amount of work to be overtaken. Each of these rooms should be fitted with a wash-hand basin and sink, and a plentiful supply of hot and cold water.

Two rooms, with recovery rooms adjoining, should be fitted up as small operating rooms for the treatment of minor casualties. A special room should also be furnished with an x-ray outfit, and arrangements should be made whereby this room can be readily darkened so that suspected fractures, etc., may be examined with the fluorescent screen.

Adjoining the admission department two small wards should be provided for the accommodation of drunks or noisy cases unfit to be placed in the general

THE REFORM AND CONTROL OF THE CASUALTY DEPARTMENT.

A GREAT OPPORTUNITY FOR THE BIRMINGHAM GENERAL HOSPITAL.

INTRODUCTORY.

For thirty years speakers and writers have denounced the abuse of hospitals. Many conferences have been held and more resolutions have been passed at great meetings in London and throughout the country, but the net result has been neither progress nor effectual reform. People who are not familiar with the working of a hospital have formed the conclusion that, the majority of the patients are well-to-do people, who put off fine clothing and expensive furs and apparel in order to don humbler garb, for the purpose of visiting a voluntary hospital, founded as a charity, so as to obtain the best medical advice and any quantity of medicine there without payment. No doubt such cases have existed, and still exist, but they are relatively few, and those who know most about hospital relief have the best reasons for affirming that the abuse of hospitals in this sense is unimportant. The real cause of the existing abuse is mainly due to the abnormal increase in the number of patients who flock to the hospitals whenever they have any minor ailment or accident, however slight such lesion may in fact be.

A PRACTICAL REMEDY.

The remedy for this state of affairs is very simple. It consists in a better system for the regulation of free medical relief and its stricter enforcement. We give on another page of the present issue a model plan of a new Gate House or Admission Block, which ought to form one of the most important units in modern hospital construction. This plan is so conceived as to render it possible to deal with all the patients who may apply each day for relief at a great hospital, whilst the accommodation and arrangements are such that, every case can be treated upon its merits, and that no patient, under any circumstances, can obtain admission, either to the in- or the out-patient department, without passing through the ordeal of a preliminary examination in the hall attached to the Admission Block. It is no use for any hospital to attempt to change its system, or to regulate the numbers of those obtaining free medical relief, unless the managers are prepared to enact that, no case shall be admitted to the out-patient department except for consultative purposes, and that no patient who can properly be provided for at a free dispensary, or at the surgery of a general practitioner, shall be permitted to obtain free medical relief, after the first visit, in any form at the hospital.

THE POSITION IN BIRMINGHAM.

We are glad to see from a recent speech by Mr. Neville Chamberlain, the able Chairman of the General Hospital, Birmingham, that a committee has been appointed in connection with that institution to consider this problem, and to find a solution for the many difficulties which have hitherto surrounded it. One great difficulty is that in Birmingham the General Hospital is dependent, to a large extent, for its income upon the ticket system; that is, upon a system which the public have come to regard as a means of purchasing medical relief for the poorer citizens through the contributions of the relatively well-to-do. It is

held, though we cannot agree with the view, that to abolish the ticket system would mean, in fact, a large reduction in income. In other words those who know most about it maintain that there is so little of the Christian spirit underlying the gifts of the subscribers to our voluntary hospitals, that, unless they get money's-worth in the shape of relief, they will not continue to give at all, or, at least, to give adequately, for the support of the hospitals. Brought face to face with this statement, no doubt the subscribers, as a body, would declare that their motives rest on much higher ground than the low basis of a *quid pro quo*. Still, the financial question is, after all, the bed-rock on which the voluntary hospital system must rest, and it is well to avoid running any risk of diminishing the income, even temporarily, by adopting changes in administration, which might prove unpopular, until they were thoroughly mastered and understood by all those who have it in their power to give or withhold pecuniary support. We, therefore, believe that in the case of a ticket hospital it is desirable, not to issue any out-patient tickets, but to substitute for them letters of recommendation which each subscriber can give to any poor person in whom he may be interested. When presented at the hospital, the letter will secure the bearer a thorough medical examination, though not necessarily any treatment, except, perhaps, on the first visit, unless the ailment proves to be sufficiently serious to warrant the gift of free medical relief. This simple modification would supply a remedy at the General Hospital, Birmingham, for instance, providing its committee displayed the necessary enterprise to provide, with as little delay as possible, the new unit of construction which we have entitled the Admission Block. They would thus be able to efficiently control their whole system of free medical relief.

A WISE EXPENDITURE CALLED FOR.

We venture to hope that the special committee which has this matter in hand at Birmingham may see its way to recommend the erection of an Admission Block similar to that of which we have given a plan this week, that they may determine to devote the out-patient department entirely to consultative purposes, and that they may not, for the sake of saving a little money, miss their present great opportunity. What intelligent Governor can be content with any makeshift because it may save a few thousand pounds of expenditure, by using portions of the existing out-patient department as a place in which casualty cases are received and dealt with. It is always bad policy to spoil the ship for a ha'p'orth of tar. Birmingham may well be proud of its great General Hospital, and that noble institution must not be rendered relatively inefficient because a few miscalled economists may hesitate to spend £5,000 or £6,000 on the erection of an Admission Block. We have satisfied ourselves that the General Hospital site is excellently well adapted for the addition of this new unit to the existing hospital buildings. We shall hope to hear that the committee have decided to put the work in hand with all reasonable despatch.

CURRENT HOSPITAL TOPICS.

A Hospital Manager's Handbook.

WE are often asked, by members of committees and governors of hospitals, for a book containing in a handy form most of the material facts about the various types of hospitals, with which it is desirable that every hospital manager should make himself familiar. The new volume of "Burdett's Hospitals and Charities" 1907, recently published, now in its eighteenth year, contains most things of importance in connection with each hospital and kindred institution, situated not only in the United Kingdom and the British Empire, but also in the United States of America. The preliminary chapters, which deal with current hospital matters and contain a mass of information of essential value to the economy committees especially of every hospital, have more than usual interest this year. Amongst hospital managers none hold a more important position than the active members of the honorary medical staff. They, as individuals, are supposed to know most about hospitals, and "Burdett's Hospitals and Charities" in its present form is a handy book which most active practitioners habitually use. The chapter on Hospitals in the United States of America, by Dr. Goldwater, is of special interest to medical and lay managers of British hospitals, as its perusal will convince our correspondents and readers. A hundred and one points of detail which arise, in connection with the administration of hospitals and medical institutions, may for the most part be readily answered by a reference to the particulars given in this book, about each type or institution concerning which precise information is desired. There are some very striking statistics of great interest to the medical profession, as well as to the public and hospital managers generally in the first chapter devoted to the misuse of hospitals. We share the Editor's confidence that the time is approaching for the institution of some well thought out and uniform plan, to limit the present number of free patients receiving relief at the voluntary hospitals in this country.

The Radcliffe Infirmary, Oxford.

AFTER a useful existence of 136 years, this institution may be said to be in a sound position financially. The report just issued shows, however, that the committee are in the habit of bringing forward each year the debt of the previous year. The tendency during the last five years has been to slightly reduce the amount of this debt, which stood at £2,676 in 1902, and was apparently reduced to £1,166 by the end of 1906, though the actual deficit for that year was £304. We would venture to point out to the committee, seeing that they must have had to pay interest all these years on the debt brought forward, that it is not good business to continue this practice when the invested funds exceed £54,800. Had the committee sold £2,000 stock five years ago and wiped off the whole debt, they would have been able to save money, and

would certainly have shown financial acumen. The average annual expenditure is under £10,000 a year, and any voluntary hospital which has invested funds equal to five years' expenditure, possesses an ample reserve for all contingencies. No voluntary hospital needs a greater margin of invested funds than the equivalent of five years' expenditure, for such an institution's dependence upon the good-will and support of the people of each generation to whose needs it ministers, is one of the essentials which secures the highest efficiency in administration for voluntary hospitals. We are glad to note that the accounts are now kept upon the uniform system, and that the ladies are actively interesting themselves in the support of the Radcliffe Infirmary. It is gratifying to find, too, that the financial position is such that Captain Rynd should have small difficulty in securing an ample revenue to meet the out-goings of each year, providing the committee decide, as we hope they will do, to realise stock, and wipe out the balance of old debt which has too long cumbered the annual statements of revenue and expenditure. We are glad to know that the League of Mercy contributed £110 to this institution during 1906. This is a new source of revenue, which would never have been obtained had it not been for the initiative of the Prince of Wales, the Princess Victoria, and the presidents, vice-presidents, and members of the League of Mercy.

A USEFUL NEW APPLIANCE.**WELBANK'S BOILERETTE.**

THIS excellent saucepan, manufactured by Messrs. Welbank, Duplex Works, near Banbury, maintains its reputation as one of the most perfect cooking utensils that can be found on the market. We have given it a careful, and in many respects a severe trial, and find that the manufacturers by no means overrate its merits when they state that it is a "perfect cooker." Porridge made in the boilerette is a revelation to anyone accustomed only to the product of the ordinary enamelled saucepan; that most difficult of beverages to prepare perfectly, chocolate, can easily be made in the boilerette. Soups and vegetables, fish and meats, are all suitable for the boilerette, and we have found



it no less useful for cookery of a lighter kind—egg dishes and the risotto that usually turns out so dismal a failure in the ordinary stewpot. A great advantage of the Welbank is that it can be left for hours without attention, and that it is economical so far as gas is concerned. To the country practitioner, to the medical student, to anyone, in fact, who wishes an apparatus in which a hot meal can be easily and efficiently prepared, we can cordially commend the Welbank boilerette. It is cheap, economical, safe, and at a pinch it may even be made to serve as an up-to-date steam steriliser!

NEWS AND COMING EVENTS.

THE new isolation hospital at Merthyr, completed at a cost of £17,000, has just been opened.

THE Swindon Victoria Hospital has received the sum of £700, anonymously, for the purpose of endowing a bed.

HER ROYAL HIGHNESS PRINCESS LOUISE, DUCHESS OF ARGYLE, has graciously consented to open the new outpatient hall of the London Temperance Hospital, on Tuesday, May 14 next.

DR. ROBERT R. RENTOUL, of Liverpool, will speak on "Woman's Health: Our Greatest National Asset," at 34 Devonshire Street, Harley Street, W., at 3.30 P.M. on Monday, April 15.

THE Royal Dental Hospital, Leicester Square, has received a legacy of £1,000 for the general purposes of the hospital, also £1,000 for the endowment of a scholarship in dental surgery, under the will of the late Mr. Alfred James Woodhouse.

ON Saturday last the Cordingley Motor Show was opened in the Agricultural Hall, Islington, N. A large number of cars and motor appliances, many of them of special interest to medical men, are on show. The exhibition will remain open until Saturday, April 13.

At the meeting of the Therapeutical Society to be held next Tuesday, April 16, in the Apothecaries' Hall, Blackfriars, E.C., at 4.30 P.M., Dr. George Oliver will read a paper on "Some Notes on the Control of Hypernormal Blood-pressure," and Dr. James Burnet one on "The Decline of Prescription Writing: Some of its Dangers and Ultimate Results."

At the annual meeting of the Hospital Saturday Fund on Saturday last, the Council reported a continuance of the steady progress made by the Fund since the abolition of the street collection. The income for the year was £26,460, an increase of £530; and £23,898 has been distributed among 205 institutions. Some 41,686 letters of recommendation has been distributed; the Surgical Appliance Committee has provided 5,321 appliances at a cost of £4,372 (towards which, it is satisfactory to notice, the patients had contributed £3,114). The report was adopted. The Lord Mayor was elected President of the Fund.

THE annual meeting of the Home Hospitals Association, under the presidency of Mr. J. Bland Sutton, F.R.C.S., was held on March 26. The chairman, in moving the adoption of the report, said that the finances of the Association were in a thoroughly sound condition, and, largely owing to the generosity of the Duke of Northumberland and the Treasurer, Mr. Cox, Fitzroy House could claim to be the best-equipped private nursing home in London. He pointed out that at Fitzroy House a patient could select his own room according to his pocket or inclination, and that extras were few. The nurses were fully trained and had been specially selected, and the institution was not a training home for nurses. The retiring President, the Duke of Northumberland; the retiring Treasurer, Mr. Cox; the auditors, Messrs. Chatteris, Nichols and Co.; and Sir John Watney and Mr. Frederick Cox, as members of the Committee, were re-elected. Votes of thanks to the nursing staff and to Mr. Sutton for presiding concluded the meeting.

MR. R. GLYNN VIVIAN, of the firm of Vivian and Sons, has given £3,600 for the establishment of a convalescent home for the blind at Caswell Bay.

DR. C. SALEEBY will open the discussion on "Alcohol and Civilisation" at the next meeting of the Society for the Study of Inebriety, to be held at 11 Chandos Street, Cavendish Square, on Tuesday, July 9.

THE executors of the late Mr. John Lawrence Toole have made a grant of £500, less duty, to the Royal Hospital for Incurables, Putney Heath, an institution to which the deceased was for many years a regular subscriber, and in the work of which he took a deep personal interest.

"ANON" has given £500 to the festival dinner list of Alderman Sir Vaughan Morgan, Bart., in the hope that five others will follow his example. The dinner is in aid of the needy funds of the Royal Hospital for Incurables, Putney Heath, and will be held at the Whitehall Rooms on May 16.

THE committee of the International Congress of Hygiene, to be held in Berlin on September 23 next, has made arrangements to afford opportunities to the members of the Congress of visiting the numerous hygienic institutions. Over one hundred establishments will be thrown open for inspection, and it is intended to publish a special guide-book in three languages descriptive of these institutions. The office of Dr. Nietner, the Secretary General, is at 9 Eichhornstr, Berlin, W.

MR. MICHELLI, Secretary of the Seamen's Hospital, Greenwich, in a letter to the *Times*, draws attention to the Employers' Liability Act which comes into force on July 1, and to the effect which it will produce upon voluntary hospitals. "Under the new Act," writes Mr. Michelli, "the assistance rendered by these institutions will be materially extended, and the voluntary hospitals will be daily employed in saving many thousands of pounds for the employers of labour and the insurance companies at the expense of the charitable public." He points out that "it is only fair play for the insurance company to pay towards the maintenance in hospital of men to whom compensation is due; but there is no provision to this effect in the Act. When a man is doctored and nursed in his own home the compensation goes to pay the doctor and the nurse; then why not when he is doctored and nursed in a hospital?"

ON Friday, April 12, the French Congress of General Practitioners will meet in Paris to discuss the burning question of reform in the existing system of medical teaching. There is a very general opinion that the system of examinations has been carried to excess, with the result that while students are offered every encouragement to study the theory of their art, practical work takes a secondary place. Diplomas won by success in the examination room are doubtless valuable as showing theoretical knowledge, but as a writer in *Le Journal* remarks, "ten years' school work cannot take the place of ten months of hospital work." The need for reform in this matter has long been recognised, and the referendum recently organised by Dr. Huchard shows that there is an overwhelming mass of professional opinion in favour of limiting the time devoted to preparation for examination, and giving more attention to practical work in the hospitals.

MEDICO-LEGAL CASES.

PROFESSIONAL CONFIDENCES OF MEDICAL MEN IN A COURT OF LAW.

THE leading authority upon this subject is the well-known decision of Lord Mansfield in the famous trial for bigamy of the *Duchess of Kingston* in 1776 (20 St. Tr. 572). In that case Cæsar Hawkins, serjeant-surgeon to the King, when called for the prosecution, objected to give evidence as to anything that had come before him confidentially in his capacity as a surgeon. Lord Mansfield then said: "A surgeon has no privilege to avoid giving evidence in a court of justice, but is bound by the law of the land to do it. . . . A surgeon has no privilege, where it is a material question in a civil or criminal cause to know whether parties were married, or whether a child was born, to say that his introduction to the parties was in the course of his profession, and in that way he came to the knowledge of it. I take it for granted that if Mr. Hawkins understands that, it is a satisfaction to him, and a clear justification to all the world. If a surgeon was voluntarily to reveal these secrets; to be sure he would be guilty of a breach of honour, and of great indiscretion; but to give that information in a court of justice, which by the law of the land he is bound to do, will never be imputed to him as any indiscretion whatever." It will be seen that Lord Mansfield makes a distinction between disclosures in a court of justice under the sanction of the law and the breach of professional confidence under other circumstances. What was then laid down as the law has been so regarded ever since.

In *Wilson v. Rastall* (4 T.R. 759), which related to the evidence of an attorney, Mr. Justice Buller said: "The privilege is confined to the cases of counsel, solicitor, and attorney; but in order to raise the privilege it must be proved that the information which the adverse party wishes to learn was communicated to the witness in one of those characters; for if he be employed merely as a steward he may be examined. It is indeed hard in many cases to compel a friend to disclose a confidential conversation; and I should be glad if by law such evidence could be excluded. It is a subject of just indignation where persons are anxious to reveal what has been communicated to them in a confidential manner. I take the distinction to be now well settled, that the privilege extends to those three enumerated cases at all times, but that it is confined to these cases only. There are cases to which it is much to be lamented that the law of privilege is not extended; those in which medical persons are obliged to disclose the information which they acquire by attending in their professional characters."

In *Rex v. Gibbons* (1 C. and P. 97) the prisoner was indicted for the murder of her bastard child. Mr. Cozens, a surgeon, was called to prove certain confessions made by the prisoner to him. The witness objected to give such evidence, on the ground that, at the time of the statement, he was attending the prisoner in the capacity of a surgeon. Mr. Justice Park said: "That is no sufficient reason to prevent a disclosure for the purposes of justice." The witness also stated that he had held out no threat or promise to induce her to confess; but a woman who was present said

that she had told the prisoner she had better tell all, and then the prisoner made certain confessions to the witness. Mr. Justice Park, after consulting with Baron Hullock, laid down that, as no inducement had been held out by Mr. Cozens, to whom the confession was made, and the only inducement had been held out (as was alleged) by a person having no sort of authority, it must be presumed that the confession to Mr. Cozens was a free and voluntary confession. If the promise had been held out by any person having any office or authority, as the prosecutor, constable, &c., the case would be different.

In *Greenough v. Gaskell* (Myl. and K. 98) Lord Brougham agreed with this view while speaking of the privilege in the case of legal advisers, though he added that "certainly it may not be very easy to discover why a like privilege has been refused to others, and especially to medical advisers."

In *Wheeler v. Le Marchant* (17 Ch.D. 681) Lord Justice Jessel said: "The principle protecting confidential communications is of a very limited character. It does not protect all confidential communications which a man must necessarily make in order to obtain advice, even when needed for the protection of his life, or of his honour, or of his fortune. There are many communications which, though absolutely necessary because without them the ordinary business of life cannot be carried on, still are not privileged. The communications made to a medical man whose advice is sought by a patient with respect to the probable origin of the disease as to which he is consulted, and which must necessarily be made in order to enable the medical man to advise or to prescribe for the patient, are not protected. Communications made to a priest in his confessional, on matters considered by the penitent to be more important even than his life or his fortune, are not protected. Communications made to a friend with respect to matters of the most delicate nature, on which advice is sought with respect to a man's honour, or reputation, are not protected. Therefore it must not be supposed that there is any principle which says that every confidential communication which it is necessary to make in order to carry on the ordinary business of life is protected."

The reason why the evidence of medical men is not privileged is perhaps not difficult to see. Lord Brougham, in *Greenough v. Gaskell*, gives as the reason for the privilege of legal advisers that it is out of regard to the interests of justice, which cannot be upheld, and to the administration of justice which cannot go on, without the aid of men skilled in jurisprudence, in the practice of the courts, and in those matters affecting rights and obligations which form the subject of all judicial proceedings. If the privilege did not exist at all, everyone would be thrown upon his own legal resources; deprived of all professional assistance, a man would not venture to consult or tell his counsellor half his case. Medical men, on the other hand, have nothing to do, as such, with the administration of justice. The reason of the privilege in relation to legal advisers does not extend to them. It is not absolutely necessary in the interests of justice that inviolable secrecy should attach to all transactions between a man and his medical adviser. The reason for the obligation of honour on the part of medical advisers is not to enable the patients by whom they are consulted to obtain justice according to law, but to secure that privacy in personal matters which every man is lawfully entitled to expect.

NURSING ADMINISTRATION.

THE PROPOSED LEGISLATION IN FAVOUR OF NURSING REFORM.

A BILL has several times been introduced into Parliament, "To regulate the qualifications of trained nurses and to provide for their registration." In view of the fact that nursing reform is the subject of all others most absorbingly interesting to nurses, it is noteworthy that the fate of this Bill, which is always a foregone conclusion, fails to excite more than the merest ripple of curiosity in their minds. An examination into its provisions may serve to explain this attitude of indifference on the part of those with whose interests it is concerned. The basis of all sound nursing politics lies in the training schools. The influence of her training school is overpowering and unique in the life of the nurse. Anything which tended to weaken this sentiment of loyalty to the traditions under which the nurse's professional training has been received would be a source of danger to nursing as a whole, and any attempt to destroy it altogether would be a futile task. Under the modern system of training the influence of the superintendent of nurses runs through the hospital. What the matron holds to be wise and wholesome in nursing matters, that is the doctrine which filters down through the sisters till it reaches the youngest probationer. The strength of this almost impalpable "prejudice" in favour of the tenets of the old training school is rendered practically indestructible when the nurse passes out of training by the extent to which her living and reputation are based on the certificate of the hospital. All the claims for consideration which a nurse possesses are based on the value of her original training. She is proud all her life of being associated with a good training school. It is her passport to employment and consideration all the world over. It brings her into immediate relations of the most cordial description with all other nurses owning the same *alma mater*, and with the medical men who have been attached to the school. Remembering these facts, and remembering, too, that the nurse, on the conclusion of her training, steps back into a world from which she finds herself differentiated by a complete shifting of outlook, and it becomes apparent that the general feeling of nurses will reflect pretty completely the feeling which prevails in the training schools. That is the great self-governing principle of the nursing profession at the present day. Loyalty to the training she has received is the central fact which regulates the precepts and practice of nurses in the absence of any State regulations.

What does the Bill to which we have alluded offer in exchange? It proposes to put the future of nursing in this country into the hands of a General Nursing Council. The Council is to have powers of a fairly complete character, except that, charged with regulating all other details of training, the length of time prescribed for the duration of the course is taken out of their hands. This is to be three years, neither more nor less, and the time is all to be spent in one institution: The Council, omnipotent

in all else that concerns training, is to have its hands tied from the commencement in this important particular, although it might seem that if this were such a vital point members of a General Nursing Council could have no two opinions about it. It is impossible to make even a guess as to what the future policy of such a council would be. Hence the general disinclination of the nursing world to place themselves under its jurisdiction cannot be grounded on distaste to any particular line of policy. It is the proposed constitution of the Council, which has deprived it of any semblance of vitality, and has rendered it so transparently inefficacious that there has ceased to be any need to oppose it.

The General Nursing Council is to consist of 19 persons. Three of these are to be appointed by the Privy Council, and these are to be representatives of training schools in England and Wales, Scotland and Ireland. It is a common practice under similar circumstances for the Privy Council to appoint, in the first instance, prominent supporters of the Bill, as presumably best fitted to undertake the carrying out of its provisions. Next there are to be five medical men, one appointed by the General Council itself, so soon as it shall be constituted, three to be appointed by the British Medical Association, and one by the Medico-Psychological Association. Lastly, there are to be 11 nurses, of whom six at least are to be past or present matrons, with one asylum matron, and these will have a permanent majority in electing the President and in deciding the policy of the Council. These nurses and matrons are to be elected by the nurses on the register, and are to be voted for in the proportion of six delegates for England and Wales, two for Scotland, and two for Ireland. The mental nurses are to elect their own matron. Nothing more delusive than the process of election by popular vote in the case of such an assembly could well be devised. The only course it is possible to adopt is the circulation of a list containing certain names to those persons qualified to record their votes, with the request that the voting paper may be returned signed if the names are approved, or that some of the names may be crossed out and others substituted if the voter wishes to secure the election of any one else. It is hardly too much to say that an instance has never been known in which the votes of individuals have had the smallest effect in influencing the appointment of a council under such conditions. The proceeding resolves itself into a vote of confidence in the policy of the Council, but it is one which cannot rouse the smallest enthusiasm even in the most inexperienced voter. A council thus elected is in reality appointed by itself, for the committee charged with the duty of preparing the list, can hardly fail to regard the supporters of its own policy as the candidates most proper to be selected. It is significant that in the Provisional Council which is to be charged with making arrangements for the election of the first General Nursing Council, four seats out of eleven

are to be at the disposition of the twin societies promoting the Bill.

There is no way in which popular election can be made effectual for the appointment of a council able to deal with highly intricate and technical details in a broad and statesmanlike manner. It is not merely a question of having opinions, it is a question of knowing the right men and women, of being behind the scenes and well acquainted with the principles and practice of the great training schools as a whole. And this is knowledge which is not accessible to the great body of

nurses, and never from the nature of the case could it be accessible to them. We believe that their instinct in these matters to be guided by their training school is wise and sincere, and we are confident that until the question of regulating the nursing profession is seriously taken in hand by the training schools as a cohering body, nurses throughout the kingdom will continue to regard nursing legislation with indifference. It is quite clear that they are not greatly tempted by the prospect of possessing such shadowy powers as under this ill-starred Bill it is proposed to put in their hands.

MODERN ALTERATIONS IN THE MATRON'S POSITION.

WITH the growth of the modern hospital the position of the superintendent of nurses is becoming modified by successive small changes until she finds herself confronted with duties which tax all the powers of an exceptionally able woman. That these posts carry a salary out of all proportion to the weighty responsibilities with which they are charged is no bar to their being earnestly desired by those best qualified to fill them. And if, as Aristotle taught, happiness is only to be attained in this world "through the exercise of our highest faculties," it is not, perhaps, surprising that women are found gladly to devote the best years of their lives to labours which give scope for the exercise of moral and intellectual qualities of no common kind.

In old days the matron took an intimate and practical share in the actual nursing. She would often devote herself to a critical case, and no operation took place without her attendance. The modern matron refrains with religious exactitude from performing nursing duties under any circumstances, much as she may hunger to be using her skill; and should she attempt to be present in each operating-room whenever it is used, a hundred other duties would perforce be neglected. She is charged with the responsibility of bringing the nursing to the highest pitch of excellence, and what is even more difficult, of maintaining it there through successive years; her observation of all that passes in the wards and in the theatre is unceasing, and her influence all pervading; but she works through others, and to the patients is little more than a kindly presence with a wonderful memory for their symptoms, perhaps, but no mantle of conscious authority such as their sister wears becomingly. It is not for them to know that the reason why the junior probationer's eyes are so red is because matron said a word to sister on her way out of the ward after one of those brief visits which leave the impression that she is merely on her way somewhere else.

For the times have changed as regards the matron's relations to her staff. The tender and intimate association of the old matron with the nurses who were trained under her wing can hardly be maintained with the big development of the training school. The probationer must look to her ward sister for rebuke and encouragement alike. She

must depend on the home sister for advice in her affairs and for the friendly control which to girls fresh from a quiet home life is so often valuable. The matron knows every step of their career through the hospital, and can measure their worth to an ounce; but they do not know, and never will know unless there is the gravest reason for bringing it under their notice the extent to which she is learning to gauge their character and powers. A great reserve force in the background—that is the position of the matron of to-day with regard to her probationers.

Still more has her position changed with regard to her sisters. How the old sisters stayed on and on. Doctors came and went, and matrons had their day; and yet the veteran sisters, who in the eyes of the students stood almost for symbols of the mother hospital herself, were found year by year unchanged and defying time. Everyone regrets the old sisters, and where they still linger the heart goes out to them as to the very best product of a passing system. But passing they are. In the present day the sister is learning experience. She may stay three years, she may even stay ten, but she is a bird of passage, and sooner or later she gets promotion or starts private nursing, and her place in hospital knows her no more. In consequence, the modern matron is for ever in process of training her sisters. There are no longer stereotyped ways in particular wards. The fresh air of recent theories is blowing in and out everywhere, and blows nowhere so hard as among the modern sister's duties, inspired by the modern matron. It gives a great deal more trouble, but the modern matron likes it. If her heart fails her at the resignation of one on whom she has learned to depend, the next minute, be sure, she is planning some alteration which she could only carry out with an entirely fresh hand. There are always compensations in hospital life.

What shall be said of the matron's part in that complicated machinery outside the wards and the training school which runs the hospital of modern times? Her staff of servants, continually changing in accordance with the sense of fluctuation in the institution, is in itself a serious charge. Constantly engaging, constantly bringing into shape, and when they leave to "better themselves," constantly giving characters, the matron can never sit down as her predecessor used to do in the comfortable assurance that only old retainers or their well-

recommended daughters made up her domestic staff. There are days off and nights out, and time-tables to be modified in accordance with the domestic catastrophes which are the rule rather than the exception in hospital life, and all enormously complicated by modern and wiser notions of the amount of recreation due to young servants. It is the matron who keeps these strands in her hands, even when she has the aid of a housekeeper, for it is on the matron's knowledge of character and on her judgment which the housekeeper relies in the superintendence of the big domestic staff.

Many of the duties which in old time fell to the matron have now been shifted from her overburdened shoulders. The accounts are rarely assigned to her, though this used to be a very common practice, and has only recently, in fact, been abandoned by King's College Hospital. Her only share in bookkeeping is in regard to her petty cash, and this has been brought down to such small dimensions in some institutions that the matron's only use for money is to buy her weekly store of stamps. All this is clear gain, and there was need for relief, since manifold departments, laundry, linen-room, stores,

dressings, have come under her sway, in all of which initiation has taken the place of routine.

There is one word which sums up the modern matron's duties, and that is "supervision." In that is included all her talents; it is the secret of all her success. She dare not settle down to spend long hours in her office, no matter what important duties she may be performing there. She is bound to devote her time to incessant and vigilant observation of every department under her care; she is always active, never hurried. Her brain is incessantly recording minute facts, and each fact calls for some action on her part or that of another. She has an admirable system for the distribution of her time; yet every moment of her day is at the mercy of events outside her reckoning. Amidst this unceasing strain on brain and temper one thing tends to keep her equable, and is, in fact, responsible for the excellent health commonly enjoyed by the modern matron. She walks on a moderate computation at least ten miles a day, and whatever else she may be deprived of in the busy life she has chosen, it is certainly neither air nor exercise.

THE COMMON TASK.

HOSPITALS AND DISTRICT NURSES.

THERE reach us almost simultaneously complaints of an opposite character, and each forcibly illustrating the want of elasticity in the present day chain of relief for the aid of the sick poor. From a hospital compelled frequently to discharge patients in a condition which makes their after-care by a trained nurse essential to their well-being, we learn that District Nursing Associations receive with scant courtesy requests for these cases to be attended to in their own homes, many replying not at all to the information sent. On the other hand, we learn that district nurses are frequently much hurt that patients are returned to their homes without any intimation being received which would enable the nurse to meet them on arrival and to continue the dressing and general treatment which the patients are probably too ignorant to carry out for themselves, and the neglect of which may seriously retard recovery. In such cases the District Nurse may not hear of the case till it has become aggravated for want of after-care. It is of the first importance to secure co-operation between district nurses and the hospitals, and we hope that without delay a general movement may be made to bring this about.

THE BATTLE FOR THE CHILDREN.

It is the welfare of about 10 per cent. of the elementary scholars which is the stake in this battle, and the Rev. H. Iselin in this month's *Macmillan* tells us this is the most pressing problem of the day. How to turn these children into decent citizens without weakening parental control, how to substitute law for license, how to provide good food in place of wasteful messes, how to redeem the children from the disorders of their parents—this is the problem.

Mr. Iselin sees hope in the action of the nurse, who is effecting what, he says, a century of

"Mothers' Meetings" has failed to touch. But he strongly advocates a bracing attitude on the part of the State towards those parents whose neglect is bringing these difficulties upon the nation. It lies with district superintendents throughout the country to co-operate with the efforts being made to induce a sense of responsibility in parents, and to regard the work of the district nurse as far-reaching in its effects, designed for greater purposes even than the immediate relief of distress.

THE NURSE TRAINING SYSTEM IN AMERICA.

The step recently taken in two prominent New York Hospitals of reducing the course of training for nurses from three years to two, is a curious comment on the effect of premature State Registration. In the New York Hospital the training school contains 85 nurses, divided into three grades. The Roosevelt Hospital has 70 pupil nurses, and seven fully-trained nurses, besides 16 male nurses. Both are general hospitals of high repute, and it is much to be regretted that they should have curtailed the term of training, since it can hardly fail to lower the standard of nursing and the status of the nurse, and this not only in the wards of these particular institutions. It is yet another proof that legislation, unless it is the outcome of a spontaneous and unanimous appeal from a united body, can effect very little in raising the standard of any profession. If imposed too soon, legislation has the effect of standardising a low minimum qualification. Should that error be avoided, the law often comes to be generally disregarded, while the profession, influenced by the irresistible laws of supply and demand, splits into two factions, one above and the other below the State requirements, both ignoring the statutory legislation, and on the whole doing very well without its proffered aid.

GENERAL PRACTITIONERS' CONTRIBUTIONS.

Important.

WE propose to devote a special page to General Practitioners' Contributions. We therefore invite from practitioners contributions based upon their experience in the management of cases, and in the treatment and diagnosis of disease; especially shall we be prepared to welcome articles dealing, practically, with treatment, and with the use and value of new remedies and methods.

No article should exceed 1,100 words in length, and, if accepted, one guinea will be paid to the writer after publication. Each communication should be accompanied by a stamped directed envelope for the return of the MS. if found unsuitable. See coupon on Special Supplement.

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Publishers are particularly requested to send advance proofs of any new books of importance, whenever possible, as the Editor has made arrangements to publish immediate reviews, and on a new plan.

The Relaxations of Medical Men.

We shall also be glad to pay for accepted contributions, from any member of the profession, on the subject of the relaxations of practitioners. This opens up a wide field, as it includes natural history, photography, sport, indoor recreations, and motor-ing. Whenever possible, original illustrations and photographs should be sent with the MS.

Suggestions Invited.

The Editor will welcome suggestions for the establishment of any new section in THE HOSPITAL, and will be glad to supply information on any subject of interest or importance to members of the profession in any part of the world.

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THE THAW TRIAL.

THE so-called expert witnesses who gave evidence at the Thaw trial confirmed the justice of the scathing definition which Lord Bramwell once gave of expert evidence. In former days this country was not without its scandals, especially in regard to such evidence, tendered chiefly in support of actions against railways after accidents. Happily the evil has greatly diminished in recent times, but there is still something left to desire which might profitably engage the consideration of those who endeavour to exercise some control over the ethics of the profession. It is not possible to give a deliberate judgment, as to the actual mental condition of the prisoner, from the abstracts of evidence which have been cabled to this country. Still the general opinion of mental experts favours the conclusion that no evidence is forthcoming which justifies the belief that the prisoner is insane. One general conclusion may be drawn from the facts which have reached this country, which uphold the view that, had a stronger judge presided over the trial, it might have gone very differently.

In spite of the criticisms which are levelled at our own system of criminal procedure, there can be no doubt that the scandal of the trial would be impossible in an English Court. For many of the discreditable episodes connected with it, American jurisprudence no doubt must not be held responsible, since the wholesome doctrine of "contempt of court" appears to be unknown in New York, or (if it exists) to be treated with derision by newspapers and public alike. But the triumph of technicality over common sense, the tedious system of impaneling a jury, the partisan character of the prosecution, the irrelevancy of the defence, and, above all, the restricted authority of the presiding Judge, have filled English lawyers with amazement. Yet both the American and English systems are derived from a common source—the English Common Law; and the causes of their divergence are to be looked for in differences not so much of principles as of method. It is to the position and authority enjoyed by an English judge, backed up by a sane and sober public opinion, that we owe the restriction put upon technicalities which are still in theory possible in our own Courts, and the keeping of evidence, even on the prisoner's behalf, within reasonable bounds. An

English Judge has always the support of the strong professional feeling of the Bar.

The issue in the Thaw case was clear; yet it was six months before the prisoner was called on to plead, and nearly another four before the jury finally disagreed. Justice in such circumstances loses not only its dignity but its moral effect, to say nothing of the encouragement afforded to wealthy criminals who can command the services of ingenious representatives. It is not for us to convict Thaw or to acquit him, though it would not be difficult to guess the verdict of an Old Bailey jury. The contrast of the trial of the Whiteley murderer is still fresh in the public mind, and it will be long before even Home Secretaries are able to destroy the sure instincts of English jurymen or the dignity and common sense of the English Bench.

The moral issues involved in this case have a very serious bearing upon the government of all civilised countries. The people in most civilised nations, in regard to certain vices, are in a state of transition, but the time has arrived when, in the interests of public morality, and for the protection of the innocent, the law should be strengthened, so as to bring into its meshes every wealthy voluptuary who uses his wealth, and the power which it gives him to destroy innocent children. All convicted of such crimes should be condemned to the madhouse or the prison for the rest of their existence. It would be unreasonable for the English people to plume themselves upon their superior morality, seeing that we have reason to believe that the Madison Tower chamber may have its counterpart in this country, and that most, if not all, of its details were modelled upon those of similar places to be found in most great cities. We have always felt that the abiding scandal of many streets in our large cities should be faced and ended by setting aside one area in each community to which houses of ill fame should be restricted, and where every occupied dwelling should be continuously inspected by the authorities, under a system which should render most of the existing evils impossible of continuance. Under such a system our principal streets in the evenings would be freed from the present abuses which make them impossible to be used in comfort by respectable people at certain hours. Then, too, all persons who

voluntarily entered a house of ill fame would have to incur the risk of publicity, because to do so they must enter and leave the prescribed area. The present English method of maintaining that in this country the vice of cities is relatively unimportant must be held responsible for the sacrifice of many young people of both sexes, who might otherwise be saved from destruction. The action of Mr. W. T.

Stead some years ago led to useful legislation, which has had some effect in controlling vice. But we English people need to-day a wholesome public conscience, which should compel the municipalities to cleanse our streets from their existing impurities, by localising vice and bringing the whole of its machinery, despite the wealth upon which it may rest, within the iron grip of the law.

THE GENERAL PRACTITIONER AND THE CONSULTANT.

FOR the last 600 years the profession of medicine in London and the larger towns in England has never been without two classes of practitioner. One class, and always the more numerous, has attended to the lesser ailments of the people; the other has been summoned, on account of its mature experience, to difficult and doubtful cases. Consultations were compulsory as long as the Barbers' Company and the United Company of the Barbers and Surgeons controlled the profession. It was enacted from very early days that if any member of the company failed to present a patient under his care who was seriously ill, or who was in danger of losing a limb, he was fined or reprimanded. The presentation was made to the company, and some member, generally the master or one of the wardens, was detailed to consult and report. The rule was admirable in its inception, but it worked badly in practice as soon as the right of consultation became a perquisite of the superior officers, since they were not always the men best fitted to give an opinion. In the seventeenth and eighteenth centuries the physicians arrogated to themselves a remarkable position, for they treated patients by "bills" or prescriptions, sometimes given on the mere report of an apothecary as to the condition of a patient whom they had never seen.

The establishment of hospitals, or rather the foundation of medical schools in connection with hospitals, gave rise to a special class of practitioner who was the forerunner of the present consultant. His hospital experience gave him opportunities of seeing a very large number of cases, whilst students, taking him as their master, called him in to consultation when they had themselves attained to practice. This is still the usual way to consultant rank, but the more perfect method is still followed in many parts of the country, sometimes in medicine, more often in midwifery, seldom in surgery. A practitioner eminent among his fellows by skill, experience, or general ability, is referred to in many cases of doubt and difficulty. Such a man has already been through the troubles of those who bring their patients to him, and he can therefore sympathise with them the more readily, and can act in the most friendly spirit of co-operation.

With surgeons and those who practise the special

departments of the eye, ear, and throat, the qualifications which are useful in medicine and midwifery must be supplemented either by natural or acquired skilfulness of hand, a skilfulness which can only be attained by long and constant practice. Dr. Joachim, the prince of violinists, used to say that if he neglected to practise for a few days he knew it himself; if he neglected to practise for a few weeks the public knew it. So, too, a surgeon must be operating daily if he is to perform a gastro-enterostomy or an excision of the larynx with the speed and certainty which alone lead to success. Such skill and practice are attained by those attached to hospitals; but in addition to these qualifications, others are essential to make a trustworthy consultant. He must be absolutely straightforward in his dealings with the patient, and frankly loyal to the medical practitioner who confides in him. There is no question of breach of faith with the best men who have already attained the first rank, for they would not have gained their position unless they had been beyond reproach.

But the desire to have a code of rules drawn up to govern the ethics of consultation shows that some consultants fail in their duty to the profession, just as it is certain that some general practitioners fail in their duties to consultants either intentionally or by the discourtesy of neglect. In this code it is suggested that the general practitioner should nominate the consultant, and although this may be serviceable as a general rule, it is often impolitic to press it. There are often many reasons which lead a patient to express a decided preference for one consultant rather than another, and so long as this preference is exercised with discretion it should not be overridden. The chief operating surgeons approach as nearly as possible to the position of pure consultants. They rarely see a patient, except on the recommendation of a general practitioner, and never operate unless the usual medical attendant has been given the opportunity of attending. In the few cases where a patient comes without a personal introduction it is usual to communicate with the practitioner, for when a patient is at first averse to any communication a few words of explanation always end in his acquiescence. Too often, however, a polite letter of explanation to the practitioner may be ignored in such cases, although the true consultant will invariably continue this practice.

ANNOTATIONS.

Alcoholism and Insanity.

THE alcohol question is emphatically one in which facts are wanted. It excites such strong feelings that to confine it within the arena of impartial scientific discussion is not an easy task. We have already expressed our opinion of the recent manifesto as an ill-advised contribution to such a discussion, and we see no reason to modify this view. As a contrast we take note of certain statements of personal experience made by Dr. Savage in the course of his Lumleian lectures. Dr. Savage recognises that alcoholic intemperance is a potent cause not only of actual insanity, but also of nervous weakness and instability, both in the individual and in his off-spring. Nevertheless, he argues that the increase of insanity at the present time certainly bears no actual relationship to the consumption of alcohol, for he feels no doubt that the English people are far more temperate than was formerly the case, and that improvement in this respect is particularly marked in the lower and middle classes. Hence the recognised increase in insanity cannot be directly placed to the charge of alcohol. Further, Dr. Savage remarks that the large number of total abstainers he sees in consulting practice has sometimes made him wonder whether "the complete and total change from moderate indulgence in alcohol to total abstinence has been altogether for the good, the mental good, I may say, of the race." But here it is necessary to remember two facts. A certain number of total abstainers adopt their position as a result of the experience of the disastrous results of excess as exhibited in their own parents, and are, by inheritance, persons of a weak and unstable nervous system. In others, total abstinence is practised as the only possible alternative to personal excess—a fact which also suggests the possession of a nervous system prone to yield to excessive strain. Such facts as these show how complex and difficult is the discussion of the whole subject of alcohol, and how necessary it is that partisan exaggeration and eloquence should be excluded from its consideration.

The Sphygmograph.

THE comparatively recent development of forms of apparatus by which the clinical estimation of the arterial blood-pressure has been reduced to a simple, and even to a merely mechanical task, has been attended by some tendency to push to one side the claims of the sphygmograph. There need be no hesitation in allowing that the modern instruments are of great value, and, indeed, they have already obtained a secure position among the methods of clinical investigation. But this by no means implies that the sphygmograph has been successfully replaced. Blood-pressure was a factor of which many physicians took due note by means of the sphygmograph long before it was clinically convenient to estimate its capacity to sustain a column of mercury, and no more exact and analytical presentation of the state of the blood-pressure can even now be recorded than is to be obtained through the agency of a sphygmographic tracing. The great advantages of the new instruments are

the readiness with which they can be employed, even by the tyro, and the statement of the blood-pressure in numerical terms. The sphygmograph, on the other hand, needs a long and careful training, and this applies both to its actual employment and to the interpretation of its records; further, it does not give results capable of being expressed as those of a definite quantitative measurement. But it has the special excellence of presenting in a certain and graphic form the state of the peripheral circulation. The down stroke of the tracing is a demonstration of the ease or otherwise with which the radial artery empties itself, and is, therefore, a measure of the degree of resistance offered by the arterioles to the flow of the blood. The tracing in this way pictures the state of one of the chief factors in the determination of blood-pressure, namely, the peripheral vessels, and it separates and detaches this from other factors. In this respect it has an advantage over the sphygmomanometer, and for this reason alone it still has a large field of utility.

Phosphorus Necrosis.

A REPORT to the Home Secretary, by Mr. H. S. Cunynghame and Dr. B. A. Whitelegge, on the methods employed in a certain match factory, and with special reference to a recent fatal case of phosphorus necrosis, has been issued as a Parliamentary paper. The report has this satisfactory feature—namely, that it includes a statement to the effect that the instances of phosphorus necrosis recorded in the factory in question must be attributed to former, rather than to existing, conditions of employment. The former involved more exposure to phosphorus than is at present the case. Nevertheless it has to be admitted that, from the point of view of the health of the workers, even modern conditions are by no means perfect. The report in question emphasises the risk of the semi-automatic machines used in the dipping department, and suggests that it would be an improvement to dispense altogether with hand labour in this department. It, however, recognises that such a proceeding would involve a very considerable expense, and though no one likes to make the admission, the commercial bearing of this suggestion can hardly be avoided in the discussion of this question. At the same time experience has shown that when the legislative screw is applied, and when all manufacturers are made to feel its pressure, many possibilities become realised which had previously been described as impracticable. Regarding the total prohibition of the use of white phosphorus, the authors of the report above alluded to say that such a step would seem logically to involve the prohibition of the use of many other substances which have proved responsible for many more industrial accidents than can be laid to the charge of phosphorus. The alternative suggestion is the provision of completely automatic machinery, so arranged as to prevent contact between the fumes and the workers, and also between the paste and the workers' hands. It may be taken as certain that public opinion will cordially support whatever steps the Home Office may feel it necessary to take in this matter.

MEDICAL OPINION AND MOVEMENT.

At a recent meeting of the Academy of Medicine in Paris, Dr. Vaillard, Director of the Military Medical School in Lyons, announced that he had discovered a specific serum for dysentery. This serum, which is obtained by the injection into horses of the bacillus in increasing doses, is specific for the so-called "dysenterie bacillaire," and the bacillus used is that discovered and isolated by Dr. Chantemesse. Dr. Vaillard, together with his son-in-law Dr. Dopfer, has been working with the serum for the past year, and has treated in all 243 cases. He claims to have obtained remarkable successes. Out of these 243 cases, 99 were severe and 25 had been given up as hopeless. Fifteen out of these 25 were cured. Most of the experiments have been carried out at the Pasteur Institute, and the serum is now prepared there. Large doses can be given repeatedly without any ill effects. The author lays stress on the importance of injections in the early stage of the disease in order to obtain a rapid and certain cure. His results are corroborated by Dr. Chauvel, Dr. Vincent, and Dr. Widai. It is, of course, not likely that the serum will prove to be of any value for the treatment of the amoebic form of dysentery, such as occurs for the most part in tropical countries.

THE Commission appointed to investigate the cause of Malta fever is to be congratulated on the work it has accomplished as a result of its researches during the last two or three years in Malta. It discovered that the disease is very prevalent among goats, and that they excrete the specific micrococcus in large numbers in their milk. In a paper read before the Epidemiological Society, Colonel Bruce gave an account of the work of the Commission, and showed that the facts afford overwhelming proof that infected goat's milk is the chief mode of infection for man. In consequence of this knowledge, measures have been taken to prevent the use of goat's milk, and, since it has been altogether excluded from the Royal Naval Hospital at Malta, not a single case of Malta fever has occurred there. Colonel Bruce has every hope that the disease will now entirely disappear from the garrison, and in consequence some 70,000 or 80,000 days of severe illness will be blotted out from the yearly medical reports of the army and navy. This will be an achievement of which the Commission may justly be proud, and for which no small amount of credit will be due to Colonel Bruce, who was the prime mover in the appointment of the Commission.

MORE than ten years ago deputations from the London County Council attended upon the Lord Chancellor to urge the necessity for changes in the methods of death certification and an amendment of the existing Coroners Acts, without, however, any practical result. Recently a further joint deputation was received by the Lord Chancellor from the Council and the Medico-Legal Society, headed by Sir William Collins and Mr. H. T. Anstruther, and from the sympathetic reply which

it received there seems reason to hope that steps may be taken to alter the present unsatisfactory condition of affairs. Sir William Collins pointed out that the revelations made by the Death Certification Committee of 1893 exposed a public scandal, which has nevertheless remained unredressed for 14 years. The percentage of certified to total deaths varies from 1.2 per cent. in London to 8.5 in North Wales, and to 42 per cent. in Inverness-shire! The most important suggestions made by the deputation are: That no human body should be buried or otherwise disposed of without a certificate by a competent medical man or by a coroner; that the medical certificate should show the fact of death as well as its cause, and also vouch for the identity of the deceased; and that specially qualified and independent medical men should be appointed to assist the coroner in preliminary inquiries, in scrutinising the causes of death and in post-mortem examinations. There can be no question of the desirability of such technical advisers, especially in view of the fact that a large proportion of coroners are without any medical training, but proper provision should be made to secure also the assistance of the medical attendant of the deceased at all inquests and post-mortem examinations, and duly to remunerate him as heretofore. In many cases the medical attendant is in possession of facts which are essential to the proper elucidation of the cause of death, and his evidence is of importance not only at the inquests, but also in the preliminary inquiries and post-mortem examination.

ONE of the latest forms of treatment for that terrible malady, tic douloureux, consists in the injection of alcohol in the course of the affected nerve. It was originally devised by Dr. Schlosser, and appears to afford better results than the osmic acid injections. Dr. Oswalt of Paris has adopted a method of injection which he claims to be an improvement on the technique of Schlosser. He passes the needle within the mouth, behind the wisdom tooth, and slides it up inside the pterygoid plate until he reaches the opening of the foramen ovale. In this way he is able to inject the alcohol into the ganglion itself, and, further, by slightly altering the position of the needle, he can inject also into all three branches of the nerve. The method requires a very exact knowledge of the anatomy of the part, and must call for considerable judgment, which can only be acquired by practice, in order to direct the needle so that the point of injection exactly corresponds to the ganglion or the course of the individual branches of the nerve. On this account it is not a form of treatment which every general practitioner can easily undertake. Moreover, when a patient is suffering from a severe attack of the disease, he does not readily submit to the manipulation necessary to carry out the injection. This difficulty, of course, might be overcome by the administration of an anæsthetic, though Dr. Oswalt does not appear to have found this necessary.

HOSPITAL CLINICS.

CONCERNING STIFFNESS OF THE SPINE.

By SIR WILLIAM BENNETT, K.C.V.O.

A Post-Graduate Lecture delivered at the London School of Clinical Medicine (Seamen's Hospital). *Concluded from p. 29.*

INTERMITTENT OR RELAPSING STIFFNESS.

Neuro-Mimesis in Relation to Spinal Rigidity.—Neuro-mimesis, the nervous mimicry of disease, does not, I fancy, attract so much attention now as it did 20 or 25 years ago, although, judging from personal experience, it is quite as important a clinical factor now as it was then. I may, perhaps, be pardoned if I remind you that the so-called intelligence displayed by young children is largely due to the results of pure imitation, and that during the early years of life the tendency, especially in girls, to imitate the characteristics and peculiarities of those with whom they continually associate is very strong; this imitative faculty being particularly attracted in certain subjects by any characteristic which is especially pronounced. Occasionally it happens that an unusually susceptible child, thrown constantly in contact with another individual, whether child or adult, suffering from some deformity or peculiarity, will unconsciously imitate the peculiar characteristic in a remarkable way. The commonest conditions thus imitated are, in my experience, disease of the hip, and Pott's disease. Confining ourselves to the consideration of the subject of this lecture, I have seen cases of slight angular curvature at the cervico-dorsal junction so accurately imitated as to deceive very shrewd observers. A peculiarity, however, of the spurious condition is that it occurs in precisely the same position, and assumes as nearly as possible the same characteristics, as the original case, whereas in the case of organic disease, especially tubercle occurring in a second member of the same family it is very rarely indeed of precisely the same form and distribution as the first—the very similarity of the two cases should, in fact, arouse suspicion as to the reality of the second. The stammering test will also invariably exclude the existence of organic disease, and if any ultimate doubt remains, the administration of an anæsthetic will finally settle the question by completely removing the rigidity if the case be one of the spurious kind. The moral of this matter is as follows: In a case of rigidity of the spine with, perhaps, apparent slight deformity, the mere fact that another member of the family has had tuberculous disease of the vertebral column is not necessarily any evidence that the second case is of the same nature, especially if the manifestations in the second case are precisely similar to those in the first; in such circumstances the possibility of neuro-mimesis should always be borne in mind.

AN INSTRUCTIVE CASE.

Some years ago a girl 14 years old was brought to me for an opinion concerning a curious stiffness about the neck and shoulders, and a peculiarity in gait which she had gradually developed in the

course of eight or nine months. The attitude was singularly restrained—the head was thrust a little forward, the chin being slightly raised; on turning from side to side the head moved with the shoulders and the neck seemed quite stiff. The general attitude was precisely that of Pott's disease in the cervico-dorsal region. The girl was well nourished, very intelligent, and in apparently good general health. She complained of no actual pain, but readily became tired, and had given up any attempt to play games. On removing the clothes the position of the head and neck was as already described, the lower cervical and upper dorsal spine was apparently quite stiff, the vertebra prominens projected much more than is usual (which suggested a condition of slight angular curvature) there was no tenderness or thickening of any kind, the bony outlines could be clearly made out, and the ordinary bending test only confirmed the impression of stiffness of the column. The stammering test I did not use, as I had not then become acquainted with it. I felt, however, that there was something deceptive about the case, and therefore examined the child under an anæsthetic, with the result that all the symptoms disappeared, the spine becoming during the anæsthesia entirely natural, whilst upon recovery from the anæsthesia the abnormal condition was resumed. What the condition during ordinary sleep was I do not know, as so far as I can recollect I never had an opportunity of satisfying myself on that point. The case puzzled me a good deal at the time; there was clearly no organic disease, and as a hysterical manifestation it was most unusual. It transpired on further inquiry that the girl had for a year or more before I saw her been constantly in the company of a patient who had tuberculous disease of the cervico-dorsal spine, and who wore a leather support having a collar round the neck to support the head and chin. This appeared to settle all doubt as to the nature of the case, which was one of nervous mimicry of the most striking kind. The position in which the patient held her head was, it will be noted, precisely that in which the head of a patient would be whilst wearing a spinal support of the kind mentioned. Removal from the associations under which the abnormality developed, and the use of massage and rational exercises, were followed by great, although somewhat slow, improvement.

The recognition of these cases is of considerable importance, for unless proper means are taken to correct the perverted function the abnormality may become permanent, a result which is all the more likely if in such a case a diagnosis of organic disease be made and the usual treatment by rest and fixation employed. There is no limit to the eccentricities which are shown by some of these patients. I remember a remarkable case at St. George's Hos-

pital, in which a clearly neuro-mimetic talipes equino-varus in a girl disappeared under an anæsthetic, and was found on the recovery from the anæsthetic to have been transferred to the opposite foot; the mistake, however, was not long in being corrected, for in a few hours the abnormality was again located in the foot originally concerned.

REFLEX IRRITATION AS A CAUSE OF INTERMITTENT SPINAL RIGIDITY.

The reflex disturbances resulting from intestinal worms in children are so manifold as to be almost unlimited; at the same time I do not know that occasional spinal rigidity is generally recognised as one of them. There is no doubt, however, that intestinal worms do produce this complication, and sometimes in a very alarming degree. A case, for example, came under my notice in which a relapsing spinal rigidity of a very pronounced kind disappeared entirely after the passage of a large mass of tape-worm.

Movable Kidney.—The following case speaks for itself. A young woman, 28 years old, of a spare and apparently healthy habit, suffered almost continuously from pain across the lower part of the spine; the pain, as a rule, was dull, but sometimes it became acute; stooping was so painful that she found it as a rule almost impossible to pick up any object from the ground. Upon examination the whole spine below the middle of the dorsal region was stiff when she bent; there was neither deformity nor tenderness, but the erector spinae were very hard. The stammering test could not be applied, as the pain on stooping was too great to allow the necessary attitude to be maintained for a sufficiently long time. On examining the abdomen the recti were rather rigid, and at first resented handling. A little gentle manipulative massage, however, led to their relaxation, and on the right side a distinct mass could be felt, which suddenly slipped away in the characteristic manner of a movable kidney. This was followed by a sense of relief like that which was usually felt when sudden or rapid modification in the symptoms happened. It therefore seemed pretty clear that the whole trouble might be due to a movable kidney which was prevented from returning to its normal site by some band or constriction after it had become displaced. At all events the probability of this view being correct was strong enough to justify the recommendation of an operation to fix the kidney. This was accordingly done, with the result that no further spinal symptoms had occurred up to the time when she was last seen—three years after the operation.

CALCULI AS CAUSATIVE FACTORS.

Renal Calculus.—Spinal rigidity, generally of the relapsing type, is met with in cases of renal calculus. I was consulted by a medical student, 24 years old, on account of a persistent pain in the spine over the dorso-lumbar region, which varied in degree from a dull ache to an acute agony; it was increased by movement, especially jolting. There was no tenderness or deformity, and violent succussion of the shoulders caused no increase of discomfort; on the right side the pain passed round

the belly "like half a girdle." When I first saw him the lower half of the vertebral column was quite stiff in all movements, and he walked in the constrained manner of a man with a stiff spine. The stammering test led to a quivering in the erector spinae, but the pain was so much increased by stooping that the test could not be fully carried out; but what I felt, was sufficient to assure me that no organic disease of the spine existed. There were no symptoms referred to the kidney, and the urine was normal saving the existence of a few crystals of oxalate of lime. A week later, although the symptoms of pain, etc., were much the same as before, the spine was quite supple and the constrained gait in walking, which was present before, no longer existed. The renal region now was a little tender, and the muscles resented pressure to a slight extent. In five successive examinations the spine was quite stiff in two, quite supple in three. In the renal tenderness no change occurred, and the urine remained normal. An *x-ray* exposure was made, and there seemed to be an opacity in the right kidney, but the case occurred in the earlier *x-ray* period, and the result was too indefinite to be conclusive. I finally explored the right kidney and removed an oxalate of lime stone as large as a hazel nut. The operation proved entirely successful, as all the symptoms disappeared and did not recur. The patient had unfortunately, in attempting to relieve the pain, contracted the morphia habit before I saw him, and the ultimate result was lamentable.

Stone in the Ureter.—Within the last eighteen months I have seen a remarkable case of this kind in which spinal rigidity and pain were the conditions complained of. The patient was a stoutish, middle-aged man, of an obviously gouty habit. The pain, which was constant, was referred to the lumbar region, and was at times intense. When first seen, rigidity of the lumbar spine was apparently complete, and the lower dorsal vertebrae moved less freely than was normal. The stammering test established the fact that there was no organic disease of the spine. On one occasion the rigidity was altogether absent. The *x-rays* showed a stone of small size in the ureter. This, under the flushing-out treatment, was subsequently passed, and the symptoms complained of did not occur again.

TEMPORARY OR TRANSIENT RIGIDITY.

It is manifest that transient rigidity may arise from several conditions affecting the vertebral column apart from those the result of reflex causes. The only cause, however, which I need mention here is rickets. The general belief that the rickety spine is a supple spine is universally taught, and rightly so; but it is nevertheless a fact that during the gastro-intestinal disturbance in rickets the spine may for a period be rigid.

In conclusion it may not be amiss to remind you that whilst on the one hand spinal rigidity is not necessarily an indication of disease of the vertebral column, its absence, on the other hand, does not show that the column is free from lesion, since in some cases of tubercle considerable changes in the condition of the column may occur without its suppleness being interfered with.

SPECIAL ARTICLE.

THE OPHTHALMOSCOPE IN PRIVATE PRACTICE.

Its Importance as an Aid to Diagnosis.

By HERBERT L. EASON, M.D., M.S., Senior Ophthalmic Surgeon, Guy's Hospital.

IN modern medicine the refinement of the various methods of clinical investigation has reached such a high standard that it is impossible for the busy practitioner to carry out the researches himself, and various successful associations for clinical investigation and research have sprung up to meet the requirements of the time. There are, however, certain instruments, the manipulation of which is comparatively simple, and which should have a place in the armamentarium of the doctor if he is to do the best for his patient and his own credit. Of these ancillary aids to correct diagnosis the ophthalmoscope is undoubtedly the most important. It is little more than fifty years since Helmholtz invented the instrument, but from that date the science of ophthalmology has progressed by leaps and bounds, being at the present time the largest, and possibly the most important, of all the special departments of medicine. By means of the ophthalmoscope the student is enabled to see a small portion of the human economy at work, and from his observations of that minute area which is situated at the back of the eye, to make a shrewd guess at the nature of the morbid processes which are at work all over the body. No other instrument gives the inquirer such accurate information as to the condition of the vascular system, or is of such importance in the diagnosis of growing lesions in the cranial cavity. Yet, to the majority of practitioners, especially those of a preceding generation, the ophthalmoscope is little more than a name, which represents an instrument of appalling difficulty in manipulation, and one which it is almost impossible to learn to use. These apprehensions are, however, unfounded, for with a very small amount of practice the ophthalmoscope may be of the greatest assistance, and by its aid many errors of diagnosis may be avoided, or additional information be obtained which will be of the utmost value to the practitioner in the treatment of his patients. The price of the best ophthalmoscopes is small compared to that of many other instruments which may be required in daily practice, as the best instrument by the best maker can be bought for about three guineas. In addition, for those who cannot master the initial difficulties of the use of the ordinary instrument, which requires some knack to obtain sufficient illumination of the interior of the eye and a good view of the fundus oculi, modern ingenuity has devised forms of self-illuminating ophthalmoscopes which carry their own electric lamp, and throw a beam of light in whichever direction the instrument is pointed. These instruments are now easily obtainable, and with them the merest novice can learn to see the fundus oculi after about an hour's practice. One hint, however, may be given with reference to the use of the ophthalmoscope in private practice; the pupil should always be

thoroughly dilated with atropine or some of its quicker, but more expensive, derivatives. With a small pupil it is extremely difficult to make a thorough investigation of the interior of the eye, and some regions, such as the neighbourhood of the macula or yellow spot, it is impossible to see owing to the great constriction of the pupil from the powerful light stimulus. The best light for the purpose is the old-fashioned Argand gas burner, though the ordinary incandescent electric globe answers the purpose fairly well if the glass is frosted.

The ophthalmoscope is required in general medicine for two purposes—in those cases where the patient complains of failure of vision, and it is required that the cause of the failure should be ascertained, and also in that even more important class of case where the patient is suffering from some general constitutional disease where failure of vision, if present at all, is only of secondary importance, but where an examination of the fundus oculi may assist the diagnosis, and may have some bearing upon the treatment or prognosis. In the first class of case it is of importance that the existence of errors of refraction should be ascertained, even though it may not be desired to estimate them accurately, and for this purpose a knowledge of the rudiments of retinoscopy is useful. By means of a retinoscopy it can be ascertained in a few moments whether the patient is suffering from myopia or hypermetropia, and a rough estimate made as to the amount, in order to ascertain whether the amount of refractive error is at all commensurate with the failure of vision.

AN OPHTHALMOSCOPIC EXAMINATION.

Retinoscopy itself is extremely simple. The patient is seated in a darkened room in front of a light so that the face is in shadow. The investigator stands or sits in front of him about a yard away, a little more rather than less. By means of the ophthalmoscope, a beam of light is cast into the eye, the pupil of which has been previously dilated. The circular aperture of the pupil is then seen surrounding a bright rose-red area, which is caused by the reflection of the beam of light from the vascular choroid. On rotating the mirror from side to side, the circular red area of illumination and the shadow surrounding it are also seen to move from side to side. This effect is most marked if the mirror is moved rapidly, and so that the beam of light travels well from one side of the patient's eye to the other. In some cases it will be seen that the illuminated area and the shadow move in the same direction as the mirror of the ophthalmoscope, that is to say, if the mirror is rotated to the right the shadow will move to the right; in other cases the shadow will move in the opposite direction to the mirror. This movement of the mirror informs the investigator at once as to the

nature of the error of refraction, if one be present. In ordinary ophthalmoscopes the mirror is slightly concave, and in cases of hypermetropia the circular area of the illumination on the fundus and its surrounding shadow will move in the opposite direction to the mirror, while in myopia it will move in the same direction. With a plane mirror the movements are reversed. The scope of this article does not permit of a description of the method of estimating the amount of the error, and further details can be obtained from any of the ordinary textbooks. All that it is necessary to point out here is that this investigation as to the existence of any error of refraction should precede any further investigation as to any gross lesion which might cause a failure of vision. In normal eyes the shadow moves against the movement of the mirror, but is not very well marked.

Having ascertained the presence or absence of an error of refraction, the investigator should examine in order the cornea, the lens, and the vitreous. Opacities in each of these will appear as black objects, movable or floating in the vitreous, but fixed in the cornea or lens. Corneal opacities may readily be seen by examination of the eye by oblique illumination with an ordinary lens, as can also superficial opacities of the lens. Having examined the media for opacities, the attention should be directed to the fundus. With a dilated pupil the optic disc will be easily seen by looking into the interior of the eye a little from the outer side on a level with the eye. Any abnormality in the appearance of the disc can then be noted, though it must be remembered that for the purposes of vision the optic disc is the least important part of the eye. That is to say, the optic disc is represented by the well-known blind spot, and any neuritis as a rule only causes some enlargement of that blind area, and not much diminution of vision. A very small patch of choroiditis or a small hæmorrhage, however, if it is placed in the region of the yellow spot will cause a great defect in the patient's central or useful vision, and for this reason great attention should always be paid to this region. It is rather more difficult to see than the optic disc, as there are fewer blood-vessels in that area, and the whole colouring is rather darker and more uniform, and one is apt to be confused by the brilliant reflection of the ophthalmoscope mirror from the anterior surface of the patient's cornea.

Having examined the disc and the macula, attention should then be directed in turn to the upper, lower, inner, and outer quadrants of the eye. Systematic examination of the eye on the lines thus outlined should be carried out in every case of defective vision, and it is surprising how with a little practice it becomes comparatively easy to discover whether or no any opacity of the media of the eye exists, or whether there is any gross lesion in the retina or choroid. It has been mentioned above that this examination should be carried out in all cases where the patient complains of any visual defect, but in general medicine it is of equal, if not of greater, importance that the patient's eyes should be examined as a matter of routine in many common conditions, to take, for example, the condition of

persistent headache. Under the stress of modern civilisation and consequent strain upon the entire visual apparatus headaches are becoming increasingly common, and with the greater strain slight defects in the mechanical accuracy of the human eye may lead to such persistent neuralgias as may render life a burden to the patient. Some writers, especially Dr. George Gould, of Philadelphia, have done much good by calling attention to the far-reaching effects of such slight disorders of the visual apparatus, but it is impossible to agree with Dr. Gould in ascribing nearly every disorder to which human flesh is heir to a small degree of refractive error. Every case of headache should, however, be carefully examined with the ophthalmoscope, first of all to ascertain by retinoscopy whether any error of refraction exists, and, secondly, to make oneself quite sure that the headache is not a symptom of some grave intra-cranial lesion.

One of the most appalling mistakes that can be made in practice is by the neglect of such a simple ophthalmoscopic examination to overlook in the case of persistent headache the presence of such inflammation of the optic nerve and its characteristic intra-ocular appearance, to try in turn every empirical remedy for headache with no result, to persist in such treatment for months, and then to learn at the eleventh hour, from the lips of another and more accurate investigator, that the headache is not of a comparatively unimportant sort, but is a symptom of grave intra-cranial pressure caused by a growth. It is no credit to the practitioner, and may be responsible for the early death of the patient, who might have been saved by more prompt treatment at an earlier date.

In routine examinations of the eye as to the possible cause of headaches, a warning may be given as to common conditions which in themselves are not important, but which may be confused with serious intra-cranial symptoms. It is a common mistake with the inexperienced to ascribe the condition of inflammation or neuritis to the disc of a patient suffering from astigmatism or hypermetropia. The classic symptoms of optic neuritis are tortuosity of the vessels with engorgement of the veins, blurring of the edge of the disc with an indistinct margin, and more or less concealment of the vessels by reason of inflammatory exudation. The ordinary hypermetropic fundus shows an optic disc smaller than normal, redder than normal, and for this reason less clearly distinguished from the rest of the fundus. In addition, the vessels may even be slightly more tortuous than normal; and relying on this redness, slight tortuosity of the vessels, and the less distinct margin of the disc, the condition may be labelled neuritis, whereas in reality it is nothing more than a so-called normal abnormality.

In cases of astigmatism also, the blurring and indistinctness of the disc due to the imperfect refraction of the media may be ascribed to neuritis, and mistakes in diagnosis made. As, however, the mistake is a pardonable one, in that a more serious condition is suspected than does in reality exist, it is only necessary to call attention to these small pitfalls to save both patient and practitioner some unnecessary anxiety.

In contrast to the disc in hypermetropia, which may be mistaken for optic neuritis, the myopic disc is often mistaken for atrophy.

One of the most constant appearances in the fundus of the myope is a large disc rather paler than usual, with a crescentic white area, of choroidal atrophy on the outer side, known as the myopic crescent. This appearance generally, especially when seen by the indirect method of examination with the ophthalmoscope, may suggest a partial atrophy of the optic nerve; but to the investigator who can, by means of retinoscopy, quickly ascertain that the eye is myopic, this resemblance will present no difficulties.

ITS VALUE IN KIDNEY CASES.

The ophthalmoscope is perhaps of most use in general medicine in all stages of nephritis. It is not necessary to emphasise here the frequency with which retinal changes accompany acute and chronic Bright's disease in old and young people, or how valuable is such a diagnostic sign. The condition of the fundus oculi in acute Bright's disease is usually very characteristic. There is some neuritis of the optic disc, and in the region of the yellow spot hæmorrhages and white patches, which are frequently of a shining or glistening white appearance, and these white patches, together with hæmorrhages, are often arranged in radial lines diverging from the yellow spot as a centre. This condition being associated with a certain amount of neuritis, is liable to be mistaken by those who have made no careful examination of the eye with the optic neuritis associated with a cerebral tumour. Patients suffering from granular kidney may have persistent headache and vomiting, and if the eye is only casually examined the presence of some cedema or neuritis of the optic disc may suggest the diagnosis of cerebral tumour; if, however, the characteristic appearance of the fundus in the macular region is also noticed in the course of a thorough examination, the presence of white patches and hæmorrhages will at once rectify the mistake. Though this so-called albuminuric retinitis occurs in both acute and chronic nephritis, it is by far the commonest in the chronic interstitial nephritis of middle age, and in arterio sclerosis. In the middle aged the existence of albuminuric retinitis is of much graver import than in young cases, for as a matter of common experience the prognosis in cases of renal disease associated with albuminuric retinitis is extremely bad. Although it is not strictly true for all cases, it may be taken as roughly accurate that few people live more than two years after the onset of the retinitis. As retinal changes very often cause but slight defect in the patient's vision, the necessity of making a routine examination of the eyes of all patients suffering from renal disease becomes apparent. To be prepared for a grave issue of the case under examination is to be forearmed, and at once the treatment of the patient can be undertaken with much fuller knowledge and confidence than if that additional knowledge had not been obtained. The ophthalmoscopic changes, however, in renal sclerosis are not limited to the characteristic appearance of albuminuric retinitis. In

many cases the first indication that the patient is suffering from some grave vascular defect is obtained from an examination of the fundus oculi.

As has been mentioned above, the choroid and retina being the most vascular tunics in the body, and being observable under high magnification during life, very valuable evidence is afforded of the condition of the vascular system all over the body.

The changes in the retinal arteries in arterio sclerosis are often very characteristic, the vessels becoming rigid, and from the changes in the vessel walls losing their characteristic retinal appearance. The ordinary retinal artery, when seen by the ophthalmoscope, shows as a circular glistening vessel, sometimes pulsating, which has upon its surface one or two bright lines which run longitudinally, and which are the reflection from its cylindrical surface of the light thrown in the eye by the ophthalmoscope. In the normal eye it will also be noticed that where the arteries cross over the veins there is no obstruction to the venous flow. In arterio sclerosis the changes in the vessel wall have altered the appearance of the reflection of the light from the surface of the artery, and they present an appearance similar to that of a metal covered violin string; that is to say, the bright lines running along the surface of the vessel are broken up to some extent, and on account of this change in the appearance the condition is termed that of *gold or silver wire arteries*.

It will also be noticed that the arteries being rigid constrict the veins wherever they cross over them, and in some cases lead to entire obliteration of the veins on the distal side.

The arteries themselves may also be of varying calibre instead of being uniform as in health, and there may be infrequent or numerous hæmorrhages scattered over the whole retina.

Such an ophthalmoscopic picture may be often seen before albumen has been detected in the urine, or before the patient has become aware that he has any serious disease of his kidneys; but, once discovered, the prognosis is very grave, few patients living more than a year or two at the outside.

It is impossible within the limits of such an article as this to mention in detail all the other conditions in which ophthalmoscopic examination of the eye is useful. In many diseases of the central nervous system, as locomotor ataxy or disseminated sclerosis, the ophthalmoscope may help to confirm an opinion already half formed; and in many diseases of the blood, such as leukaemia, corroborative evidence may be found in the condition of the fundus oculi.

Diabetes also, tubercular meningitis, and other similar conditions may give rise to characteristic appearances of the fundus; and in such grave conditions as melanotic sarcoma of the choroid early discovery of the malignant centre may lead to a timely operation, and the saving of the patient's life.

This outline of some of the more common conditions in which the ophthalmoscope is of inestimable value may, it is hoped, stimulate practitioners to use this valuable instrument more freely, for it can be confidently predicted that habitual use will only serve to emphasise its ever-increasing value as an aid to diagnosis.

THE TREATMENT OF INSANITY.

Existing Defects and their Remedy.

II. THE PUBLIC ASYLUM, THE REGISTERED HOSPITAL, AND THE LICENSED HOUSE.

So long as mental disorder is not very pronounced, the neurologist consultant, who is usually first called upon to assist the general practitioner, is willing to remain in charge of the case; but if the insanity is unmistakable, he commonly retires from the case, and the alienist consultant comes upon the scene. The alienist usually has to consider, and determine on, the propriety, first, of allowing the patient to remain at home or of removing him; and further, if the second alternative is chosen, of determining the destination of the patient. He does not entertain the project of a sea voyage, nor does he recommend a nursing home, except for some purely temporary reason and as a transient measure. The alternatives that occur to him are travelling or residing with a selected companion; private or family care; or entrance into an institution. In selected cases, which are very few, however, the first course is judicious and efficient. In other selected cases the second course is, as we have already seen, attended by excellent results. Whichever course is selected, the choice of the companion or host is of the greatest importance. The residue, which comprises by far the greatest number of cases of pronounced mental disorder, must be sent to an "institution for the insane" specially adapted, equipped, and staffed for the purpose of receiving persons of unsound mind.

Of these institutions there are in this country three kinds—the public asylum, the registered hospital, and the licensed house. The first is mainly for the "pauper" class, a term which has in this connection its strictly legal meaning, and merely signifies a person who is unable to support himself, or whose relatives are unable to support him. It does not at all necessarily connote the undesirable qualities that are apt to be associated with the term "pauper." Many most respectable persons—artisans, clerks, governesses, and professional men—and their relatives, become "paupers" of necessity when they become insane. Many of the public asylums have now a private wing in which patients are received for sums which wholly cover the cost of their maintenance—a very excellent provision—and some public asylums have a private wing in which they receive patients for sums much in excess of the cost of maintenance, so making a large profit—a provision the excellence of which, as a form of municipal trading, is open to considerable doubt.

The second class of institution consists of the registered hospital, founded, built, and usually to some extent endowed, by private persons for the reception, at unremunerative rates, of persons who have been gently nurtured and are unable to afford the fees of licensed houses. These institutions are managed by committees who give their time and services gratuitously, and the officers who perform the medical and administrative work are paid fixed, and usually very liberal, salaries. In

this way it was proposed to eliminate the "principle of profit" which, Lord Shaftesbury declared, "vitiate the whole thing." Whether the noble-minded peer who procured the magna charter of the insane, the Lunacy Acts, 1845, was right or wrong, we need not inquire, for in spite of his legislation and of the well-meant efforts of many other philanthropists, the "principle of profit" has not only not been removed, but has extended from licensed houses to registered hospitals, and from registered hospitals to public asylums. It is hard to eradicate one of the fundamental instincts of humanity; and indeed, "the principle of profit" is a necessary part of their being. They are most of them endowed, but the endowments are not nearly enough to pay the current expenses. For these it is necessary to depend mainly upon the payments made by the patients; and manifestly, the larger these payments are in the aggregate, the greater is the success of the administration. The men at the head of these institutions share with the rest of Western humanity the desire to be successful, and to be known to be successful. If the institution was unable to pay its way it would have to be closed, and the staff must be dispensed with. The better it pays, the more money there is to spend on improvements—and improvements are always needed. The accommodation soon becomes insufficient, and the buildings must be extended. The larger number of patients necessitates a new kitchen, a new laundry, a new recreation hall, a new chapel; more ground must be bought, more buildings erected; and so the process goes on. Perhaps it is not always a negligible consideration that the man who makes an institution a success is worthy of his reward; that the labour of administering a large establishment is greater, and deserves a larger salary, than that of administering a small one. We need not inquire too curiously into motives; we can see that not only is the growth of these institutions inevitable, but that they must be more and more run on the "principle of profit." The standard of accommodation is constantly rising; for more luxurious accommodation higher fees must be charged; until a stage is reached in which there is no practical difference between the management of a registered hospital and that of a licensed house.

Licensed houses form the third-class of institutions for the insane. They are avowedly managed upon the "principle of profit," and so have the advantage, at least of candour, over the registered hospitals. The difference between the two classes of institutions is that the increase of licensed houses being forbidden by law, the profit which is made goes into the hands of the proprietors; while the increase of registered hospitals being unrestricted, the profits go to extension of the institution. The interest of the managers is in each case balanced to the same extent, between keeping up the existing establishment on such a scale as to meet competition, and extracting a surplus for other purposes.

POINTS IN DIAGNOSIS.

THE DETECTION OF BLOOD IN EXCRETA.

Small Quantities of Blood in Vomited Matter, and in Fæces.

WHEN the amount of blood in the stomach contents or in the stools is large, there is little difficulty in its detection. It is usually obvious to the naked eye. In connection with the stools there may be difficulty in cases of true melæna from gastric or duodenal hæmorrhage; for the patient may be taking charcoal, iron, or bismuth, each of which may render the motions black, and one may be in doubt as to whether the melæna is due to drugs or to altered blood. The doubt in such cases may readily be set at rest by collecting a small quantity of the fæces on a piece of lint, dropping three drops of alcoholic solution of guaiacum resin on to one edge of the black mass, and then pouring on some ozonic ether; when the melæna is due to blood the typical blue colour appears, just as it does in the similar test for blood in urine. This blue colour is due to oxidation of the guaiacum resin, such oxidation not being effected by blood alone, nor by ozonic ether alone, but readily produced by blood and ozonic ether together. The test is a poor one from the chemical point of view, for many other oxidising substances besides blood are able to augment the action of ozonic ether in this way, and so to produce the blue colouration with guaiacum; but from the clinical point of view the test is fairly conclusive, because blood is the only one of these substances likely to be present in the stools. If one wanted to be more accurate still, one would make a solution from the black fæces, and use the spectroscopic test for the detection of the pathognomonic absorption bands of hæmoglobin or hæmatin.

WHERE EXAMINATION IS DESIRABLE.

It is when the amount of blood is too small to be obvious to the naked eye that its detection requires special care. The presence of small quantities of blood in the gastric contents may be of great importance, for example, in distinguishing cases of carcinoma of the stomach from cases of edentalous dyspepsia. Every medical man is constantly coming across patients in whom he wonders whether the gastric pains and vomiting are really due to neoplasm or whether they may not be entirely due to the inefficient action of teeth which are either carious and useless, surrounded by sepsis, or are deficient in number, the few remaining fangs being worse than useless, in that they are themselves too few to properly masticate the food, whilst at the same time they prevent the jaws from closing upon the food. Profuse hæmorrhage is distinctly rare in cases of gastric carcinoma; the "coffee ground" vomit, in which the coffee-ground appearance is due to small quantities of altered blood, is by no means common. The majority of cases of cancer of the stomach present no blood in the vomit, recognisable by the naked eye. In such cases the method of testing for blood to be described below may materially assist the diagnosis.

In the case of stools, again, small quantities of

blood may escape detection in the ordinary way, and yet may be discovered by a simple procedure; the kind of case in which this may be very useful is one of tuberculous ulceration of the intestine. In the majority of such cases there is neither diarrhœa nor obvious blood with the stools; quite often the autopsy in a case of phthisis shows extensive tuberculous ulceration of the bowel when there was little or no clinical evidence of it during life. The detection of repeated small quantities of blood in the stools, apart from hæmoptysis, would materially assist the diagnosis. The same applies to cases of diarrhœa, in which acute or ulcerative colitis may be suspected; and other similar conditions readily occur to one.

THE METHOD.

The method is as follows:—About two drachms of the filtered stomach-contents, or a similar quantity of the fæces made up into a thin paste with ordinary tap water,* are poured into a large test-tube, together with about a third-part of ordinary B.P. acetic acid. The mixture is well shaken, and then ether is added, the amount of ether required being equal to about half the total bulk of the fluid previously in the tube. The whole is then well shaken up together. The ether takes up most of the blood. The test-tube is then allowed to stand for a minute or two until its contents have separated into two layers; the clear ether containing the blood floats uppermost and should be poured off into a fresh clean test-tube; on now adding to it a drop or two of alcoholic solution of guaiacum resin and about half a drachm of ozonic ether, or 20 drops of a 5-per-cent. solution of peroxide of hydrogen, the typical blue colour will appear if blood is present. A similar ethereal extract may be examined spectroscopically if preferred.

When the blood is extracted in this way by ether after acidification of the stomach-contents or fæces with acetic acid, it is said that as little as one milligramme of blood can be detected. The test, of course, does not indicate the source of the blood, and to prevent any fallacy arising from the small amount of blood there is in butcher's meat, it is as well to have given the patient a diet containing no blood for a day or two beforehand. Blood swallowed from a source in the mouth, nose, or lungs will have to be excluded upon clinical grounds before the positive reaction can be taken as evidence of a bleeding focus in the stomach; and in regard to the stools the blood may occasionally be extraneous, as, for example, during menstruation. Nevertheless, the test is itself so easy that there are many cases in which the practitioner will gladly apply it. The diagnosis may often be assisted by the detection of blood which is not evident to the naked eye.

* The tap water should always have been previously tested with the guaiacum and ozonic ether, for it not infrequently happens that the tap water by itself contains substances which give the blue colouration.

POINTS IN TREATMENT.

THE TREATMENT OF ADHESIONS:

By Thiosinamine and Fibrolysin.

THIOSINAMINE, we are told, is a derivative of the ethereal oil of mustard (*Sinapis*); it is an allyl-thio-urea compound in which the allyl radicle is attached to an amido group of the urea. Fibrolysin is the proprietary name for what is apparently a combination of thiosinamine and sodium salicylate, soluble in water. The proprietary name is derived from the effect of the compound—namely, the power it seems to have of resolving fibrous tissue in some way.

There is one great objection to the use of either drug—the fact that hypodermic administration is essential. Hypodermic medication is upon the increase, but there can scarcely be any doubt that no medical man would resort to subcutaneous injections if the same results could be obtained by administering the drugs either by the mouth or by the rectum. Notwithstanding this serious objection, there are numbers of cases in which thiosinamine or its sodium salicylate compound are likely to receive extensive trial, for they are cases in which no other form of medical treatment has yet succeeded, and in which even surgery has failed. Every doctor knows the misery produced by perigastric adhesions, unrelieved by gastrojejunostomy; by appendicular adhesions; by perimetritic adhesions; by fibrous stricture of the urethra; by periarticular adhesions and pseudo-ankylosis due to such troubles as gonorrhœal rheumatism; by fibrous stenosis of the œsophagus; and so on. If the drugs under discussion can do no more than relieve these troubles without actually curing them—even if the relief is obtained in but a few cases out of the many that are likely to be treated by them—they will be welcomed. There is already a considerable amount of evidence to show that thiosinamine and its derivative really do lead to some absorption of fibrous tissue. The reports come chiefly from the Continent, where the drugs seem to have been tried and tested since 1892. In England they have attracted notice much more recently, but now they are being tried here too, and it seems that the benefits described by such great authorities as Professor Hebra, Professor Neisser, Professor Ewald, and Dr. Baumstark are being confirmed.

WHAT IT DOES.

The position of affairs seems to be this: No ill results are yet recorded; in more cases than not the result is nil; in many patients, on the other hand, there is marked subjective improvement, with diminution of the pains, increase in weight, and ability to return to the ordinary duties of life; in a few cases the results have been almost marvellous. Amongst the latter, a case of Professor Neisser's may be quoted: A man swallowed some strong caustic soda when he was 22 years old; stenosis of the œsophagus resulted, and the stricture became so complete that no bougie could be passed through it; not even fluids could be got down, and a gas-

trostomy was performed. The œsophageal stricture persisted for eight years, notwithstanding all the efforts of eminent surgeons and physicians to overcome it. Thiosinamine injections were then resorted to, and given every second day. The stricture began to soften forthwith; after the third injection it was found possible to get a small sound through the site of stenosis; after the twenty-fourth injection the largest size of bougie could readily be passed, and the patient was able to eat anything, and swallow large mouthfuls without any difficulty at all. He had had no return of the stenosis a year later. It may naturally be urged that the cure was fortuitous, and not really assisted by the thiosinamine; but those who saw the result would be quite certain to use the thiosinamine in other cases. Seeing that the stricture had been absolute, and had existed for eight years in spite of every effort to overcome it, the argument is certainly in favour of the relief from thiosinamine being rather *propter hoc* than merely *post hoc*.

INDICATIONS FOR ITS USE.

In any case, the drug is well worthy of trial in other similar instances. The indication for its use is the existence of cicatricial fibrous tissue which we have no other means of getting rid of. It is quite useless, it seems, in cases of neoplasm; at any rate, malignant neoplasm. All observers are unanimous in advising it only for cases in which the cicatricial process is mature and old; in cases of recent inflammation it is liable to increase the trouble rather than diminish it, owing to the lighting up of the dormant inflammation. One would hope that relief could be obtained from it in cases of thickened pleura, adherent pericardium, chronic mediastinitis, and so on, in addition to the other conditions that have been mentioned above.

DOSAGE.

The dose of thiosinamine usually employed is 3 grains (0.2 gram). Fibrolysin is made up in sealed glass bulbs, the contents of each being the dose for one injection. Thiosinamine may be prepared for injection by mixing it with sterilised glycerine and distilled water in the following proportions:—

| | | | | |
|-----------------|-----|-----|-----|----------|
| Thiosinamine | ... | ... | ... | 2 parts |
| Glycerine | ... | ... | ... | 8 parts |
| Distilled water | ... | ... | ... | 10 parts |

The injection may be given with an ordinary hypodermic needle and syringe, all the usual aseptic precautions being observed; it may be made into the subcutaneous tissues of the arm, of the abdomen, or any part of the body; that is to say, it does not seem necessary to inject it in the neighbourhood of the cicatricial tissue which it is desired to resolve. The dose is repeated every second day for two or three months.

CARCINOMA OF THE STOMACH.

The Significance of the Presence of Lactic Acid, and of Deficiency or Absence of Free Hydrochloric Acid, in the Gastric Contents as a Means of Diagnosis.

It is a mistake to suppose that the absence of free hydrochloric acid from the contents of the stomach is by any means pathognomonic of gastric carcinoma. Very far from it. Nevertheless, clinical examination of the gastric juice for free hydrochloric acid has a certain value, and a real value, in making the diagnosis, provided the limitations of this value are clearly understood. Unfortunately, in one's student days, one hears the teaching that "the absence of hydrochloric acid from the gastric juice in this patient favours the diagnosis of carcinoma of the stomach," and one is apt to take this to mean that "when a patient has no free hydrochloric acid in his gastric juice he most probably has a gastric carcinoma." The result is that one continually comes across the notion that: "Absence of free HCl = carcinoma of the stomach."

In regard to lactic acid, in the same way, students are very apt to carry away with them the belief that the presence of lactic acid in the vomit is necessarily pathological.

Neither the absence of free hydrochloric acid nor the presence of lactic acid in abundance need be pathological at all. On the other hand, each of the conditions may be pathological; that is to say, may be the result of disease in the patient. To understand this, the main points in the physiology of ordinary gastric digestion must be clearly borne in mind.

WHEN FREE HCl IS NORMALLY FOUND.

After a simple meal, consisting, perhaps, of beef and potatoes, what occurs in the healthy stomach? The food has been masticated and mixed with saliva; the ptyalin is converting the boiled starch into maltose. The presence of food evokes a flow of active gastric juice. This consists of water containing two ferments—pepsin and rennin—salts, and hydrochloric acid. The pepsin very soon begins to convert the proteid into albumoses and peptones; the rennin converts caseinogen into casein, and this in turn is converted into albumoses and peptones by the pepsin. What happens to the hydrochloric acid? Each molecule of it, as it comes into contact with a molecule of proteid, combines with the latter in a loose kind of way to form a molecular compound termed "syntonin"; as long as any molecules of proteid remain free, the hydrochloric acid which is secreted by the oxyntic cells of the glands at the cardiac end of the stomach becomes combined with some of it in this way. This is what is meant by *combined hydrochloric acid*. Only when more molecules of the acid have been secreted than there were molecules of proteid in the meal eaten will a surplus of hydrochloric acid be left free. It is clear that, even under perfectly healthy conditions, a considerable time

must elapse before free hydrochloric will be present. The more proteid the meal contained, the later will it be before free hydrochloric can be expected. *After an ordinary mixed meal of medium size it is found that free hydrochloric acid is seldom present until three-quarters of an hour after eating.* During all this time the reaction of the gastric contents will be acid to litmus, because both combined hydrochloric acid and the acid sodium phosphate turn blue litmus red.

Fermentation of milk takes place, with the formation of lactic acid, so long as no hydrochloric acid is present free. When all the proteid has combined with hydrochloric acid to form syntonin, and a surplus is left free, the formation of lactic acid rapidly diminishes and ceases; the lactic acid already formed becomes absorbed, and in a healthy stomach lactic acid ceases to be found when there is plenty of free hydrochloric acid. This is to say that lactic acid is normally present at certain times, but when present at other times it is due to defective secretion of hydrochloric acid. The presence of lactic acid is only pathological when this acid is there at the wrong time; its presence then means precisely the same thing as deficiency of free hydrochloric acid.

As has been said, the time at which hydrochloric acid is to be expected after a meal depends largely on the nature of the meal and on the amount of proteid in it. This being so, it is not enough to know merely that such and such a patient's vomit contained no free hydrochloric acid; before we can say whether the absence is pathological or not we must know that the vomit contained no free hydrochloric acid *when vomiting occurred at such and such an interval after eating, the constituents and amount of the last meal being so and so.*

THE IMPORTANCE OF TEST MEALS.

It is on this account that test meals are given. The test meal may consist of what you will, but it must be known what is the proper interval after it; that the contents of the stomach, recovered either by vomiting or by a tube, ought to contain free hydrochloric acid in a healthy man. This interval is bound to vary with each variation in the amount and constituents of the meal. There are certain meals for which the interval has been worked out experimentally, and it is usual to employ one or other of these, recovering gastric contents at the appropriate interval after each. In order to begin with as empty a stomach as possible, a test *breakfast* is probably the best; the following are advocated by various authors, and occasions arise in which each in turn may be more advantageous than the other:—

1. Ewald's Test Breakfast.

| | |
|---|---------|
| White bread | 2½ oz. |
| Weak tea, of which one-third is milk, with sugar <i>ad libitum</i> .. | ½ pint. |

The gastric contents should contain abundant free hydrochloric acid if recovered after one hour.

2. Klemperer's Test Breakfast.

| | |
|--------------------|--------|
| White bread | 2½ oz. |
| Milk | 16 oz. |

The gastric contents should contain abundant free hydrochloric acid if recovered after two hours.

3. Germain See's Test Lunch.

| | |
|--------------------|---------|
| White bread | 5 oz. |
| Minced meat | 2½ oz. |
| Cold water | ½ pint. |

The gastric contents should contain abundant free hydrochloric acid if recovered after two hours.

4. Riegel's Test Dinner.

| | |
|--------------------------|---------|
| Gravy soup, about | ½ pint. |
| Beef steak | 2½ oz. |
| White bread | 2½ oz. |
| Water | ½ pint. |

The gastric contents should contain abundance of free hydrochloric acid if recovered after three hours.

In regard to the method of recovering the stomach contents, either a stomach-tube or an emetic may be used. If the tube be chosen, the method should not be by lavage; that is to say, no additional fluid should be poured in, for the object is to obtain the gastric contents unaltered. Many patients strongly object to the tube; in such cases the administration of 30 grains of zinc sulphate as an emetic is preferable, the patient being told beforehand that he will be sick; and it is best that he should in any case remain in bed at least for the time being. It not infrequently happens that 30 grains of zinc sulphate fails to produce vomiting, in which case mechanical stimulation of the fauces may be required.

The best-known test for free hydrochloric acid is Günsberg's reagent, but in practice this is much less easy to apply than is the tropæolin test. All that is needed is a white saucer and some solution of tropæolin OO, which can be obtained through any chemist. Two drops of the tropæolin OO are smeared over the bottom of the saucer, and held before a fire until the saucer is at about body temperature and the tropæolin is quite dry. It forms a pale-orange stain. A drop of the gastric contents is then allowed to fall upon the centre of the yellow stain; if free hydrochloric acid be present, the yellow at once changes to a beautiful deep violet; this change of colour is produced by free hydrochloric acid, and not by either the combined hydrochloric acid, the lactic acid, or the acid salts, any or all of which render the gastric contents "acid" to the litmus test.

It is, of course, possible that the hydrochloric acid is present in too large an amount; if this be suspected, it is best to recover the stomach contents at a shorter interval after eating. For example, Ewald's test breakfast may be recovered in half an hour; it should then contain no free hydrochloric acid under normal conditions. If the tropæolin test shows free hydrochloric acid at this time, there is hyperchlorhydria, in association with which there is very liable to be gastric or duodenal ulceration.

If, on the other hand, no free hydrochloric acid is found at the proper time after the test meal, to what extent does this favour a diagnosis of gastric carcinoma? The answer to this question entails a discussion upon why carcinoma of the stomach should lead to deficiency of hydrochloric acid secretion. That it very often does so is certain, and it is on this account that the test for free hydrochloric acid has an undoubted diagnostic value. But how is it that gastric carcinoma thus alters the gastric juice? It is clear that it is seldom owing to the destruction of the oxyntic cells by the new growth; for the latter is commonly at or near the pylorus, whereas the oxyntic cells are in the glands at the cardiac end of the stomach. There are all sorts of theories upon the subject; but whether or not it may be the whole explanation from a strictly pathological point of view, the theory which is most useful from the clinical standpoint is that *it depends upon the patient being really ill*. When we are really ill all sorts of secretions suffer. It must be clearly borne in mind, however, that all sorts of other illnesses may cause absence of free hydrochloric acid from the gastric contents at the proper time after a meal. This is so, for example, in many cases of acute illness, such as lobar pneumonia and typhoid fever; and in many chronic affections, such as mitral stenosis with failing compensation, cirrhosis of the liver, phthisical cachexia, the cachexia of malignant disease in which the primary growth is not in the stomach, and so on. It is only when the clinical evidence already points to the patient's disease being in his stomach that the absence of free hydrochloric acid at the proper time after a meal affords evidence in favour of a diagnosis of gastric carcinoma. Indeed one may summarise the matter shortly thus:—

1. The absence of free hydrochloric acid is normal for a certain time after each meal.

2. Its absence is only pathological when the conditions are such that the gastric contents of a healthy man would have contained free hydrochloric at the same interval after the same kind of meal.

3. The presence of lactic acid is normal after a meal containing milk, until such time as free hydrochloric acid should be present. The persistence of lactic acid for a longer period has the same clinical significance as the deficiency of the hydrochloric acid, and as the latter is the easier to test for, examination for lactic acid helps little for purposes of diagnosis.

4. The absence of free hydrochloric acid at the proper interval after food is an indication that the patient is seriously ill, and that his juices are consequently out of order; its absence only favours a diagnosis of gastric carcinoma when the other clinical evidence has narrowed the possibilities down so that the diagnosis lies between gastric ulcer or the like on the one hand, and gastric carcinoma on the other. With the former of these hydrochloric acid is likely to be present in excess, so that in a patient in whom there is a doubt as to whether the stomach lesion is simple or malignant, the absence of free hydrochloric acid from the stomach contents at the proper interval after a test meal favours the diagnosis of gastric carcinoma.

REMEDIES AND THEIR USES.

Drugs acting on the Bronchial Mucosa.

Pyrenol.—This body is a compound of salicylic acid, benzoic acid, and thymol, and is a white crystalline powder, slightly hygroscopic and possessing an aromatic odour and slightly burning taste. It produces a mild diaphoresis and is a cardiac tonic. It has no irritant action on the digestive mucosa. It has been found valuable in pneumonia, where its stimulant action on the heart is of importance (Winterberg, Wein. Klin. Rundsch., 1905). A number of cases of bronchial asthma have also been benefited, as it promotes expectoration and acts as a sedative to the sensory nerve endings. From its composition it will be seen to possess antiseptic properties, and thus it has been found useful in chronic bronchitis with fœtor and pyrexia. In pertussis one observer has recorded good results. It is not apparently of much value in tuberculosis. The dose is 5 to 15 grains three to five times daily, either in tablets or in cold water, milk, tea, coffee, or cocoa. It is decomposed by heat. It may also be given in powders. In a mixture the solution (5 per cent. for adults or 3 per cent. for children) may be combined with oleum menth. pip., to disguise the taste, and, if necessary, syr. codeinæ or heroine hydrochloride may be added to the mixture. It is supplied by Reitmeyer and Co.

Tussol is the mandelic acid ester of antipyrin, and is a white crystalline powder, soluble in 15 parts of water, and much more soluble in alcohol. It is decomposed by alkalis and also by milk, so that it should never be prescribed with these substances or shortly before or after a milk meal. It possesses the antipyretic and analgesic action of antipyrin, and is also a stimulant to the secretory glands. It is indicated in bronchial and laryngeal catarrh, but especially in pertussis, for which condition antipyrin itself has often been found beneficial. No ill-effects have been observed after its use in children, and some observers consider that it is superior to antipyrin, and distinctly shortens the duration of the attack in whooping-cough. The dosage is:—

Children under 1 year 2-5 grains per diem in divided doses.
2 to 3 years 5-10 grains per diem.
3 to 5 years 15-20 grains per diem.

In older children and adults $7\frac{1}{2}$ grains may be given three or more times daily. It may be made up with syrupus aurant. or any other convenient flavouring agent. It is prepared by Meister, Lucius, and Brüning.

Grindelia robusta.—The liquid extract of grindelia of the British Pharmaceutical Conference is made with alcohol; Messrs. Parke, Davis now prepare an extract in which an aqueous alkaline menstruum is used, which is said to secure a more efficient pharmacological action, and also has the advantage of compatibility with syrups and aqueous fluids without precipitation. It has a

sedative action on the sensory and motor nerve endings, and in large doses the central nervous system also becomes affected. Eventually a narcotic or comatose condition is produced. In small and moderate medicinal doses the heart is quickened and the blood pressure raised; in large doses there is slowing of the heart, vaso-dilatation and fall in blood pressure. It is owing to its effect on the vessels that its diuretic action appears mainly to be due. Its action on the sensory nerve endings in the respiratory mucosa and its stimulating effect in small doses on the respiration suggest its value in asthma and bronchial catarrh; recent investigations have failed to determine which of its constituents is the active principle, and have given discordant results as to the nature of these bodies. In the present state of our knowledge, therefore, it is of importance to employ some standard preparation which can be relied on to contain all the ingredients of the plant. The following prescriptions have been advised in asthmatic conditions:—

| | | | | |
|-----------------------|-----|-----|-----|------|
| Ext. grindeliæ fluid. | ... | ... | ... | 3ij. |
| Pot. iod. | ... | ... | ... | 5ij. |
| Syr. tolutani ad | ... | ... | ... | 3iv. |

F.M. One teaspoonful every 3 hours.

| | | | | |
|-----------------------|-----|-----|-----|---------|
| Ext. grindeliæ fluid. | ... | ... | ... | 3iv. |
| Syr. rhei | ... | ... | ... | |
| Syr. Sennæ | ... | ... | ... | aa. 3j. |

F.M. S. A dessertspoonful (3ij.) every half hour during the spasm; when relieved the same dose every 4 hours.

Drosera.—A fluid extract of this plant, the well-known "Sundew," is also prepared by Parke, Davis and Co., as an expectorant especially in whooping-cough. Although the reports are not all favourable to its action in the latter complaint, it appears to have been efficacious in many instances, while it appears in therapeutic doses to have no ill effects of a secondary nature. The fluid extract is not miscible with water; the dose is 5 to 20 minims for adults, and less for children.

Saw Palmetto.—This is another drug prepared by the same firm which has recently been recommended in bronchial and laryngeal affections as a sedative. It is also credited with a general stimulating action on metabolism. In acute laryngitis and in whooping-cough it has met with some success. The dose of the fluid extract, which is not miscible with water, is $\frac{1}{2}$ to 2 drachms.

Pertussin is a fluid extract of German thyme made up to a strength of 1 in 7 with syrup. There is no other active ingredient. As its trade name implies, it is intended specially as a specific for whooping-cough, but its action, which is apparently that of a disinfectant expectorant, will enable it to be used in acute and chronic bronchitis and other affections of the respiratory passages. It is miscible with alcohol or milk. In whooping-cough $\frac{1}{2}$ to 1 drachm doses are given frequently, but in older patients half an ounce may be ordered thrice daily or oftener. It appears to have no ill after-effects. It is obtainable in England from Messrs. Christy and Co.

PRACTICAL NOTES ON DIAGNOSIS AND TREATMENT.

Leucorrhœa.

A SOLUTION of alum, 10 to 20 grains to the ounce, is a useful injection in cases of leucorrhœa.

Deafness in Congenital Syphilis.

WE know of no form of ear disease other than that due to syphilis in which, without any obvious destruction of parts, complete and permanent deafness in both ears can be brought about in the course of a few weeks. But this is not a rare occurrence in the subjects of inherited syphilis.—*Mr. Jonathan Hutchinson.*

Bruit in Aneurism.

WITH regard to abdominal aneurism and all other aneurisms, I want to say that a bruit is one of the least important and most misleading of diagnostic points. There may be aneurism without bruit, and again, a bruit over a tumour does not necessarily mean that the tumour is aneurismal. Further, I have met with cases both of thrill and bruit in aortic pulsation which were not cases of aneurism.—*Sir Douglas Powell.*

Gonorrhœa.

IN the early stages of this disease injections should never be employed, and in the free secretion stage most cases can be cured by simply administering the oleo-balsams, keeping the patient's bowels open, and forbidding alcohol. In neglected and chronic cases injections are most valuable, and among those to be recommended are a 3 per cent. watery solution of ichthyol, or permanganate of zinc, $\frac{1}{4}$ grain or more to the ounce. One of the best is: Zinc sulphate grs. 3, tinct. catechu m10, tinct. opium m5, glycerine m15, water to 1 oz.—*Mr. Albert Carless.*

Optic Neuritis.

THE first and chief significance of optic neuritis is the presence of organic disease. If you can exclude a blood state or a constitutional condition, you may feel sure that there is organic disease within the skull or orbit. But neuritis is important, not only for diagnosis, but also for prognosis. Commencing subsidence of the neuritis may be the first indication of commencing subsidence of a morbid process in the brain, and persistence of the neuritis may be the indication of persistence of disease in the brain even when, for the time being, all other symptoms have passed away.—*Sir Wm. Gowers.*

Ringworm of the Scalp.

AFTER cutting the hair short, the head should be washed every morning with soft soap and water, and then the following ointment is applied on linen, the whole being covered with gutta-percha tissue and secured by a skull-cap:—Salicylic acid grs. 10, chrysophanic acid grs. xxv., ichthyol 30 per cent., vaseline to 3j. This is repeated for four consecutive days, when the ointment as above is replaced by a 20 per cent. ichthyol ointment. Then, after a further four days, the first ointment is substituted, and this alternation is continued. As a rule a cure can be effected in from three to six weeks.—*Professor Unna.*

Pityriasis Versicolor.

TURPENTINE will promptly remove the evidences of this disease from the skin. To prevent reappearance of the spots the clothing should be disinfected.

Hæmorrhoids.

THE following is a useful application:—Calomel 3ss, hydrochloride of morphine grs. iiss, bismuth subnitrate 3vj, glycerine 3ij, vaseline 3vj. Make an ointment and apply freely.

Chronic Gonorrhœa.

THE following may be applied to the urethra by means of a flexible French bougie:—Yellow oxide of mercury 4 grains, lanoline and white vaseline, of each, half an ounce.

An Anodyne Lotion.

CHLOROFORM liniment, to which is added menthol in the proportion of one dram to an ounce of the liniment, may be successfully applied as a lotion for the relief of neuralgic pains.

Epididymitis.

THE following has given good results in acute epididymitis:—Solution of acetate of morphine 3iiss, chloral hydrate 3iiss, ammonium bromide 3ij, syrup of tolu 3iv, water to 3iv. A tablespoonful every three hours.

Retention of Urine in Hysteria.

WHEN you hear, in the case of a young girl who is obviously healthy and properly formed, a story of the patient not passing urine, you should at once think of hysteria and should believe that in all probability there is some fraud in the case.—*Sir Dyce Duckworth.*

Chronic Metritis.

CHRONIC metritis is to a large extent, if not at first at any rate afterwards, a constitutional condition, and everything which improves the constitutional state of the patient improves her state as regards the metritis. The two best remedies to give internally are perchloride of mercury and iodide of potassium.—*Dr. J. B. Potter.*

Alkaline Treatment in Rheumatism.

IN many cases of subacute rheumatism alkalies will succeed when the value of salicylates has become exhausted. But it is essential that full doses should be given, and this can only be determined by noting an alkaline reaction of the urine. Quinine may be usefully combined with the bicarbonate and citrate of potassium.

Opium in Delirium Tremens.

BEFORE you decide to give opium you should make sure that the kidneys are sound, as any suspicion in that direction absolutely forbids the use of the drug. If you give opium at all you should give it early and in a large dose—40 to 60 drops of laudanum for example. To begin with 20 drops, then 40, then 60, as the days go on, is a most dangerous practice. Further, as long as you do not improve the patient's nutrition opiates will be in vain. Free feeding is therefore essential.—*Dr. A. B. Duffin.*

GRADUATES' MEDICAL SCHOOLS.

THE POLYCLINIC.

WHAT IT OFFERS TO THE GENERAL PRACTITIONER.

By COLONEL CLUTTERBUCK, M.D., M.R.C.P.Lond., Hon. Physician Marylebone General Dispensary.

UNTIL a comparatively recent date, the opportunities available for qualified medical practitioners to keep themselves abreast of the times by attendance at systematised clinical demonstrations organised specifically on their behalf, were limited. A man could indeed go to one of the hospitals, and especially to the hospital with which he had been connected in his student days, and could expect, as a rule, to be received with courtesy and consideration, but he knew he had no right to be there. He could only see such of the routine work as happened to be in progress at the time of his visit; he could claim nothing beyond a recognition of the altruistic rule that no medical man should withhold from a professional brother information on any subject that can be of use in the treatment of disease. Besides the hospitals, there existed, of course, the medical societies: these were never intended to be mere schools for keeping up the knowledge of medical men in the ordinary business of medical life: they have work of a higher kind to do, the advancement of scientific knowledge and research. Moreover, their meetings can only be held at somewhat infrequent intervals during a limited part of the year, and so could only be available for those living in or near the town in which they existed. But many a medical man, and especially the busy general practitioner, wanted facilities more than such institutions could offer. He wanted to be able periodically, and at any season that might happen to be convenient to him, to attend at some place where, on payment of a reasonable fee, he could for himself see and learn how to apply the most recent methods of medical and surgical practice.

HOW IT WAS STARTED.

It thus became obvious that there was room for an institution devoted primarily to the instruction of qualified men, and more especially, perhaps, to the needs of the general practitioner. To meet this want the Polyclinic was established in the year 1899, its doors being open only to those holding a registrable medical qualification. Here we see the first advantage of such a teaching institution as compared with most previously existing bodies. A hospital or similar institution is, and must be, primarily devoted to the treatment of the sick, associated, of course, with the instruction, in certain recognised institutions, of medical students; the Polyclinic is primarily devoted to the needs of the qualified man, and adapts itself accordingly, thereby enormously increasing the value of medical treatment to the public generally. This does not mean that the treatment and needs of patients who happen to be seen at the Polyclinic are in any way ignored or neglected;

on the contrary, such patients are either receiving treatment elsewhere from competent hands, while at the Polyclinic the proper methods, advantages, and results of such treatment are explained to attending members; or, on the other hand, the patients have the advantage of examination by, and the opinion of, some of the most highly-skilled and experienced members of the medical profession in London.

Before going further I would wish to explain that I do not for one moment mean it to be thought that there are not other institutions in London affording facilities to post-graduates on somewhat similar lines, and still less would I belittle the value of the admirable work that is being done at such institutions. I am here only indicating the value of the Polyclinic as it stands, merely remarking that it is not conducted on quite the same lines as are most, if not all, other post-graduate teaching institutions.

WHERE IT IS.

A point of importance in connection with such a college as the Polyclinic is its situation. The location of the college in Chancery Street may certainly be considered favourable. Situated near such important thoroughfares as Euston Road, Tottenham Court Road, and Gower Street, train, tube, tram, and bus are all available to those wishing to reach it.

THE STAFF.

Since the main object of the college is teaching, pure and simple, it is obvious that in the selection of its regular staff regard must be had to their teaching capacity, apart from, and in addition to, their recognised skill and experience in the particular branches of the profession which they practise. This consideration cannot possibly enter so largely into the selection for appointments to a hospital staff. The value of a teacher in such a post-graduate institution is readily appraised by the members attending his lectures or classes; it is unlikely that a proved failure would remain long in a post where his failure was only too painfully evident. Hence every member joining for instruction has a sort of guarantee of competence on the part of the teachers to impart their knowledge in an assimilable form. Again, so much and such varied literature is now at the service of every medical man, that no teacher could afford to allow himself to get behind the times, at all events in his own particular line; a few awkward questions from intelligent members of his audience, many of them ready to verify for themselves his facts, would soon bring his shortcomings home to him. The relations of teacher and questioner here are very different from those that obtain between a teacher and a still unqualified student.

INDIVIDUAL TEACHING.

Another advantage is that it is fully recognised that a limitation in the numbers attending a practical class is all to the advantage of the learner, so that each one may reckon on more or less individual teaching; moreover, the instruction is given, whenever practicable, in a less formal manner than must be adopted in a course of purely systematic lectures. Nothing is more enlightening than intelligent questioning, or even reasonable arguments, on difficulties and doubts that come up during practical and clinical investigations and instruction; enlightening not only to the individual questioner, but to the other hearers, who thus see the different sides of the same facts as they present themselves to different minds. A certain "freedom of debate" is permissible in such circumstances.

Great importance is attached to making the teaching as useful as possible; in the practical classes, which can be attended for small fees, members are given every opportunity for seeing and making themselves proficient in the use of recent appliances and methods; for instance, directly the possibilities of the opsonin theory were recognised, a class was arranged at which members could see, and themselves assist, at the whole conduct of the process.

I remember once in my student days seeing one such practical demonstration. It was a case of tumour of the kidney, and the instructor, after going briefly but clearly through the conditions that might be present, eliminated them one by one, finally deciding upon renal tuberculosis. Some of the urine was centrifugalised, the deposit stained in the usual way for tubercle, and the bacillus there and then demonstrated under the microscope. Such a demonstration gave me, and, no doubt, all that attended it, a clearer grasp of the whole subject than any purely academic lecture or individual reading could have done. It is this style of teaching, applied, of course, to newer and ever-increasing numbers of methods, that can be expected at the Polyclinic. Further, members may for a small fee have a bacteriological, or other microscopical examination made of fluids or tissues, and, if they wish, can have it arranged so that they may be present and see the whole process carried out themselves. This offers great facilities for members renewing their acquaintance with laboratory technique, or for learning the application of new discoveries. New work is constantly being brought forward, being limited practically only by the demand which is shown to exist for the acquisition of information about it.

It is true the college is not affiliated to any hospital or other institution having beds, but even this may not be without a compensating advantage. In a hospital all the cases have to be gone through as they come—I refer chiefly to the out-patient department—and many may have to be attended to which are necessarily without much interest to a post-graduate. The patients brought up at the clinics in Chenies Street, whether at practical classes or at the afternoon consultations, may all be expected to show some points of interest, having been selected to illustrate or enforce some point in diagnosis or treatment; or they have been brought

by a member so that he and the patient may have the benefit of the opinion and advice of some special authority. As I have myself seen, the opinion of leading consultants in London is at the service of members in this way.

THE CONDITIONS OF MEMBERSHIP.

The institution is sufficiently progressive—in, I hope I may say, a favourable sense—to admit qualified women to the privileges of membership. Tutorial classes, or, as they may be described, coaching classes, are established periodically for those preparing to enter examinations for the higher degrees and diplomas. These classes are conducted by men with every qualification to instruct in the branches they deal with. I am able from personal experience to testify to the value of this tutorial teaching. Discoveries and theories are nowadays produced at such a rapid rate that it is impossible to avoid falling behind unless one has for some reason to study and appreciate each discovery of value as it appears, and to prove its efficacy in the amelioration of the conditions of the sick. Within the past ten years I have heard men who had attained to some eminence in the course of their practice ignore the usefulness of the microscope, and argue that the x-rays could teach a competent man nothing that he could not equally well discover by his own unaided senses of sight, hearing and touch. This attitude is one in which all men working in a groove must fear, to some extent, to fall, but it is a fatal one for the modern medical man.

ITS SOCIAL SIDE.

There are reading-rooms, a library, and museum provided for the use of members, current literature also being available for their use. A library and reading-room are conveniences that must be provided in any modern building, but they are of quite secondary importance in the objects of the college.

In order that graduates may, if they wish, gain an insight into the work and methods of the college before definitely committing themselves to membership, complimentary tickets are issued on application, entitling the holder to attend the afternoon consultations and systematic lectures for three successive days: everyone is thus enabled to form, from personal observation, an opinion as to the possible value of the institution to himself.

Most visitors to London, especially members of a profession, many of whom spent a considerable portion of their student life at a metropolitan medical school or hospital, look forward to meeting old friends and acquaintances, while those settled in London welcome an opportunity of greeting old professional comrades whose lot has taken them to the country, or abroad. The annual dinner held in connection with the Polyclinic affords a pleasant opportunity for the renewal of such acquaintanceships, when friends can discuss the affairs of the State, and learn how each has been faring since the last meeting—none the less prosperously, I'll be bound, because they have been persuaded at some time to become members of, and participate in the advantages offered by, the Polyclinic.

RESIDENT MEDICAL OFFICERS' DEPARTMENT.

HOSPITAL RESIDENTS AND ECONOMY.

It is doubtless true that house physicians, and resident medical officers generally, often prescribe expensive drugs without considering whether cheaper medicines might not prove equally effective. This is especially the case in the out-patient and casualty departments of large hospitals. In the wards, the treatment is largely under the control of the visiting staff, and we do not propose to criticise from an economical point of view the prescriptions of the leading members of the profession. What we are here concerned with, is the indiscriminate ordering of expensive drugs by junior staff officers, often in large doses, and often for long periods of time. This common form of extravagance is not so much due to carelessness, as to ignorance of the relative cost of medicines. Newly-qualified practitioners, with no experience of general practice and of drug bills, have usually the vaguest ideas of what medicines cost. As students they may have been taught to avoid unnecessary extravagance with dressings and bandages, but we do not know of a single teacher of materia medica or therapeutics who, in his teaching of these subjects, makes any point of economy in the use of medicines, or even indicates to his pupils the fact that some drugs are more costly than others, and that some are very costly indeed. These may be sordid details, unworthy of the attention of a consulting physician, but to the general practitioner they are distinctly important, and the sooner he grasps them the better.

We do not wish for a moment to suggest that economy in drugs should be pushed to absurd limits. There are certain absolutely indispensable remedies which, however costly, must be prescribed in full doses, if the patient is to have the best, or, indeed, the only treatment for his disease. Potassium iodide, for example, and antidiphtheritic serum must often be given in large quantities, without regard to the expense incurred. Economy in such cases is impossible.

But, on the other hand, there are many chronic diseases, frequently met with in out-patient practice, which need not be treated, as they often are, and for many months, with large doses of expensive drugs. If it were certain that proportionate benefit was derived, the case would be quite different. It would be quite justifiable, for instance, for a house physician to give pounds' worth of iodides and guaiacol to every patient with osteo-arthritis, if he were convinced that by these means only the patient would be really relieved. But iodides are not a specific for chronic rheumatic affections, as they are for tertiary syphilis and for many cases of actinomycosis. They occasionally seem to do some little good, it is true; and they are recommended, among other measures, by the best authorities; but the disease is

practically incurable, and general practitioners, who cannot afford to supply such costly medicines, are often successful in relieving their patients' sufferings with cheaper remedies.

These are only cited as examples to illustrate our point. We cannot here mention all the expensive drugs which are constantly ordered in routine fashion for casualty patients, nor can we contrast the prices of the various alternative remedies which may be used for the same diseases. Details of this sort can be obtained from the hospital dispenser, or may be compiled from the text-books with the aid of a druggist's price-list. What we wish to convey is, that resident medical officers can often save their hospitals large sums of money by remembering that drugs vary greatly in price, and that from the cheaper ones they may still obtain good results in treatment. Hospital pharmacopœias are in the main compiled with a view to economy, but they do not meet all cases, and it is quite possible to depart from them and yet avoid extravagance.

With regard to diet and extras for in-patients, the resident staff are usually allowed the same latitude as is given to them in the case of the treatment of out-patients. Here also they can exercise economy, and, at the same time, do the best for their patients.

It is, of course, very tempting for a humane house surgeon to order delicacies for poor patients who are accustomed to semi-starvation and the coarsest of food. He feels that their stay in hospital should be made as pleasant as possible. But while taking care to provide everything that is essential for their comfort and their proper treatment, he should remember that hospital incomes are limited, and that every luxury ordered for one case may mean so much the less money for the bare necessities of another case. The ordering of diets is nearly everywhere left largely to the discretion of the resident staff, who should be careful to remember their responsibilities in this matter. Extras, including alcohol, soon mount up, and very slight extravagance in this direction greatly increases the cost per bed of a hospital. In some hospitals where funds are low and the pinch of competition is felt, alcohol has to be signed for by the visiting staff. This rule is naturally often evaded, and we believe that it is a poor way out of the difficulty. It would be better to put the matter plainly before each house officer on his appointment, and to leave the honourable fulfilment of the governors' wishes in his hands. Any want of confidence in their loyalty and good sense is keenly resented by resident medical officers, and there is little doubt that the work of the hospital is carried out most efficiently and most economically in those institutions where pleasant relations exist between governors and staff, and where the resident officers enjoy a reasonable authority and are not subjected to unnecessary interference and dictation.

THE ADMISSION OF CASES OF WHOOPING-COUGH.

WHAT to do with a child who is seriously ill and is suffering from whooping-cough, presents one of the hardest problems with which a house physician or a receiving officer has to deal. To admit it into a ward in which there are other children who are not afflicted with the disease, is to add very considerably to the risks which these run. Whooping-cough is sufficiently serious in itself, but complicating other diseases it becomes a much increased source of danger to child life. At the same time there is grave responsibility in sending back to its squalid and insanitary home a child who is dangerously ill with, say, broncho-pneumonia and whooping-cough. Broncho-pneumonia needs above all things proper nursing and constant medical attention; and the exposure incidental to bringing the child for treatment as an out-patient, usually does more harm than the medicines which are given do good. Drugs are, indeed, the least important part of the treatment of this disease; and yet they form the only possible out-patient measures which can be adopted, for general directions to the out-patient class are largely useless.

Recognising the difficulties and dangers in admitting whooping-cough patients into wards containing children suffering from other diseases, the Great Ormond Street Hospital for Sick Children has wisely set apart a special ward for the treatment of children with this disease. This solves the problem at once. The larger general hospitals might very well follow this example, and might set apart small wards for the reception of cases of pertussis, just as they do for patients with diphtheria. Smaller hospitals, however, being already overburdened, might find this ideal arrangement too expensive. With them we fear the problem for the present will have to remain unsolved.

Even in hospitals which possess special whooping-cough wards, there will always remain the difficulty of recognising the co-existence of this condition in children who have prominent symptoms of other diseases. The parents have a singular habit of suppressing the fact that a child has "whooped," or that it has coughed till it vomited, or that, without definitely doing either of these things, it has for weeks lived in the same room with other children known to be suffering from whooping-cough. They do not as a rule deliberately conceal these facts; they simply do not recognise their significance.

It often happens in the winter months that a child who has long been suffering from whooping-cough, develops broncho-pneumonia, and that, during the progress of the fresh disease, it ceases to "whoop." The unwary house physician, satisfied with the mother's statement that the child has only been ill for a few days, and finding every evidence of dangerous broncho-pneumonia, admits the child forthwith into a general ward, without going further into the history. In the course of the next day or so, the true nature of the case becomes apparent; but by that time other children in the ward may have become

infected. This is an accident which does not often happen twice to the same house physician.

It is during convalescence that children with whooping-cough are most liable to develop dangerous broncho-pneumonias. One can thus partly understand how it is that ignorant parents, absorbed in the new and alarming condition, fail to inform the medical officer of a previous disorder, from which, so far as they can tell, the child has already recovered. Nevertheless, a history suggestive of whooping-cough can nearly always be obtained in cases in which this condition has been present. Some day, perhaps, the public will learn to appreciate the grave nature of this disease.

NOTES, QUESTIONS, AND COMMENTS.

THE editor of the Resident Medical Officers' Department of THE HOSPITAL invites contributions to this column both from resident medical officers and from other members of the profession. Short articles, notes, queries, or suggestions bearing upon this branch of medical practice will always receive careful consideration, and those that are suitable will be published in due course. Correspondence, short and to the point, is particularly invited, as by this means the value of the R.M.O. Department will be greatly increased.

Articles, whether in the form of letters to the editor or otherwise, should in no case exceed 600 words in length, and should, if possible, be shorter than this. Postcards with short notes, questions, or notifications of recent hospital appointments will be welcomed.

All communications for this column must be guaranteed by the name of the writer, which will not be published unless he expressly wishes it, and should bear the words "R.M.O. Department" on the envelope or the address side of the postcard.

Items of news from the resident officers' quarters of the principal hospitals, infirmaries, and asylums throughout the kingdom are invited, and, when of sufficient general interest, will be published.

The editor will also be pleased to receive and reply to confidential communications from resident medical officers and to consider any suggestions that may be made for the improvement of this department of THE HOSPITAL.

Brief notes and comments on new methods of diagnosis and treatment which are under trial in hospitals and are likely to be of practical use to readers will be especially welcome; and we shall be glad to receive questions or comments bearing on these subjects both from general practitioners and from R.M. officers.

BOOKS RECEIVED.

THE F. A. DAVIS CO., PHILADELPHIA.

"Text-book of Psychiatry." By Dr. E. Mendel.

"Psychology applied to Medicine." By D. W. Wells, M.D.

EDWIN J. BRETT, LTD.

"The Observations of a Johnny," etc.

CASSELL AND CO.

"First Lines in Midwifery." By G. E. Herman, M.B.

"Worry, the Disease of the Age." By C. W. Saleeby, M.D.

NELSON AND CO.

"The Three Musketeers."

BAILLIÈRE, TINDALL, AND COX.

"Manual of Anatomy," Vol. II. By A. M. Buchanan, M.D.

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

CURRENT HOSPITAL TOPICS.

The Waterloo Hospital for Children, S.E.

THIS institution has been working for 90 years, and is now being rebuilt as a memorial to her late Majesty Queen Victoria. It has occupied the present site since 1823, and two-thirds of the new hospital have been completed and are now in use. Since March 7, 1899, to the end of 1906, £45,225 have been expended upon land, buildings, and equipment. It is stated that a further £22,700 is required to complete the building and to liquidate the present debt. By special efforts the debt on the building fund has been reduced by upwards of £13,000 during 1906. We consider such a result, under all the circumstances, to be highly creditable to everybody concerned. On page 138 the statement appears in large type that "*the assured annual income is only £830, against an estimate of the annual expenditure of £6,000.*" On page 16 the report states that the income for maintenance from all sources is £5,836 17s. 1d., while the expenditure is estimated at £4,594. It will be noticed that these statements are in direct conflict the one with the other. The larger figure is made up of annual subscriptions, £1,365; King Edward's Hospital Fund, £500; Hospital Sunday and Saturday Funds, and collections, £153; income from investments, £404; patients' contributions, £297; making a revenue of £2,719, all of which, under good management, may be regarded as assured. It further includes £660 from legacies, the average receipts from this source during the previous five years having been £785; and £2,085 from donations, of which at least one-half may fairly be regarded as assured revenue from this source each year. It thus appears that the total assured revenue at the present time may be set down, under good management, as amounting to at least £4,400 per annum, against an estimated ordinary annual expenditure of £6,000. In view of these facts, we would urge the committee to revise the statements on page 138, for they certainly cannot rest upon the audited accounts, as we have just shown. Nothing does a voluntary hospital more harm, in these days, than to issue an appeal containing figures which do not rest upon a business basis. The larger givers to hospitals properly turn a deaf ear to loose statements, in hospital appeals, which are not supported by audited accounts.

The Hospital for Diseases of the Skin, Blackfriars.

THIS institution has had a somewhat chequered history of more than sixty years. The report, which is stated by the authorities to be out of print, contains certain rules, but they are so loosely drawn that it is not easy to interpret them in a business sense. From the statements contained on pages 5, 6, and 7 of the last report, that for 1905, it seems that donors of £21 qualify as life governors, and an annual subscrip-

tion of not less than three guineas constitutes a governor. It would appear, however, that both life and ordinary governors have to be proposed for election at a meeting of the committee. There are three trustees of the funds, which amount to upwards of £7,000, and a committee of eight members. At a meeting of the governors which was summoned just before Easter, the committee met—to pass the report—one hour before the governors assembled. After sitting half an hour, we are informed by one of those present, that the door was opened and the assistant-surgeon, with a few other persons, raided the room, and made themselves very objectionable to some of the committee present, including the chairman. They then constituted themselves a meeting of governors, though the hour fixed for the annual meeting had not yet arrived, and proceeded without more ado, though they would appear to have had no locus for the purpose, to elect themselves a committee, and to appoint the assistant-surgeon as full surgeon and chairman of the Board. How irregular these proceedings were will be manifest from the fact that, the assistant-surgeon has only held office for two years, whereas rule 8 provides no assistant is eligible to be elected surgeon before he has served six years as assistant, unless special circumstances, in the opinion of the committee, require the waiving of this rule in favour of a particular individual. Here, then, we appear to have the case of a so-called hospital without proper regulations, which has been raided by a few individuals, who claim the right to take possession and rule the institution, without apparently legal status or authority. It seems to us, in such circumstances, that the old committee is the only body with authority to govern the institution. We expect that the trustees will move the courts to protect the subscribers' interests, by authorising them to carry on the affairs of the institution in accordance with its rules, until such time as they can reorganise the whole hospital and place it on a business basis. Neither King Edward's Hospital Fund nor the Hospital Sunday Fund makes any grant to this hospital, and we should hope that the Hospital Saturday Fund authorities will take prompt steps, to mark their sense of the existing chaos, by refusing to contribute anything further to the funds, until the whole institution has been reconstituted and reduced to order. As matters stand at present a grave scandal appears to have been created, and we presume that that is the view which is likely to be taken of the recent proceedings by the advisers of Her Majesty Queen Alexandra, whose name appears as patroness, and by the vice-patron the Duke of Rutland. In view of the facts we have stated, can anyone be surprised that in the present day certain special hospitals do not commend themselves to public countenance or public support?

ADMISSION DEPARTMENT OF A GENERAL HOSPITAL.

1. THE GATE HOUSE OR ADMISSION BLOCK. *(Concluded.)*

In the plan we published on page 46 last week, provision is made for a sitting-room for the medical officer on duty. This is a new and essential feature in the admission-block unit, for it should secure



FIG. 1. A FIRECLAY BASIN WITH AN ARM LEVER WITHOUT TAPS.

that no patient is kept waiting for many minutes before being seen. At present regrettable delays often take place, and much dissatisfaction and avoidable suffering may arise from this defect in the administration of a general hospital.



FIG. 2. A FIRECLAY SINK WITH STANDING PLUG.

Special attention should be paid to the plumber work; all pipes should be exposed, and all basins, sinks, and fittings of the simplest possible type.

Fig. 1 shows a very good and simple basin made of fire-clay, suitable for an examination room or casualty operating room. The supply of hot and cold water to the basin is worked by means of an arm lever, and no taps are required. Another advantage is that the cold water always comes first, and there is no danger of being scalded.

Fig. 2 illustrates a serviceable type of sink, also made of fireclay, in which there is a standing waste acting also as a plug. The basins and sinks should discharge into an open gutter, protected at the end by means of a trap covered with a movable grating.

The other fittings in the examination-room should be as simple as possible, made of enamelled iron, and with ball-bearing casters to facilitate their being easily moved about.

II. ITS THOROUGH SUPERVISION.

The superintendent should keep in direct touch with all that is going on and be satisfied that everything is in order; that courtesy and tact are extended to applicants for admission, as well as to their friends and to visitors to the hospital; and he should be ready to give advice or assistance to the junior medical officers whenever it is required.

The superintendent should be responsible for the admission and refusal of all patients; this, of course, implies the possession of a medical qualification. After the patients are admitted they are under the care and direction of the visiting medical and surgical staff, but no applicant should be refused admission without the superintendent's sanction, or, in his absence, that of his responsible deputy.

In a hospital connected with a teaching school, the number of attendants would necessarily be greater in proportion to the number of beds than in a hospital which is not a teaching school. But it must be borne in mind that a hospital of 800 beds does not require double the number of porters that a hospital with 400 beds requires; nor does a hospital of 400 beds require double the number of porters necessary for one of 200 beds. For a hospital which is a teaching school of, say, 500 to 550 beds, a janitor should have the assistance of six or seven porters. He is responsible to the superintendent for the work and good conduct of all the men under him; he sees that they are punctual and attentive to their duties, courteous to visitors, and careful in the handling of patients. He should also be responsible for all letters and parcels delivered at the institution, and see that they are regularly distributed. A note should be made if letters and parcels are opened or defaced when delivered, and the postman should endorse this. The admission department should never be left without a porter in attendance. In order that no confusion may arise, it should be clearly understood that when an ambulance attendant or policeman hands over the patient to the hospital staff, his responsibility ceases, and on no account should such an attendant be permitted to offer suggestions regarding the patient. *(To be continued.)*

THE COUNTY COUNCIL AS A HEALTH AUTHORITY.

LIFE AND DEATH IN THE DOSS-HOUSE.

IN the year 1894 the County Council first took over the oversight of common lodging-houses. The Council inspectors visit these by day and night, and prosecute owners who do not comply with the regulations of the Common Lodging-House Acts. Incidentally the Council accumulates a great deal of information which should be useful to those who really want to know how the poor live, and not merely to talk about it. First it appears that beds, either very cheap or absolutely free, exist in sufficient numbers to meet all the requirements of the population. The authorised accommodation in these lodging-houses has varied but little for a considerable number of years. In 1897 there was accommodation for 28,929 persons, in 1905 for 28,965, but within the intervening years it had been somewhat smaller, the lowest amount being in June 1902, when it stood at 28,441. And at no time during this period has the entire accommodation provided been made use of, though doubtless there was pressure in some localities while there were empty beds in others. But taking the metropolis as a whole, there has always been a considerable margin of empty beds. The highest number of persons recorded is at a census taken on November 14, 1903, when 25,107 slept in lodging-houses, but when a census was taken during 1904 and 1905 the number of occupants was on each occasion under 23,500. Yet withal, either from sheer poverty or from faults in the distribution of the available accommodation, there are always about 2,000 homeless vagrants wandering about the streets at night, or sleeping as best they can on staircases, in doorways, or under arches. An attempt made on the night of January 29, 1904, to make a census of these showed that the council inspectors counted in all 1,797 of these homeless vagrants, and a similar attempt made on February 17, 1905, gave a total of 2,181. That is to say, about one in 2,000 of the inhabitants of London have nowhere to lay their heads. It does not follow, however, that those who wander about all night have been similarly wandering all day. It is a general custom for the keepers of common lodging-houses to allow the frequenters of them to lounge about the kitchens all day, and, indeed, until closing time, which is between midnight and one o'clock in the morning. Until the house closes the keeper cannot tell who is and who is not going to pay for a bed, so they wait till the last moment before turning out the non-payers. Thus the night bird may have been dosing all day in a warm, if not absolutely comfortable kitchen. Of late some lodging-house keepers have abandoned this practice, and have allowed no one the shelter of the house who has not the means to pay for his bed; after this change it is reported that "those who before used to be 'turn-outs' found work and paid for their night's lodging." Whether or not London is the loadstone it is supposed to be to the countrymen, it seems certain that it is to its own children that the great city is most unkind. One of the County Council inspectors asked 318 persons who were receiving free food from the Church Army or the Salvation Army, where they came from, and the replies showed that 277 were Londoners, 39 came from the provinces, and only two were foreigners. The statistics of homelessness have a clear bearing upon the waves of unemployment, and we must infer that within the last two years trade has so far improved as to lift a considerable number of people from the level of the casual shelter of the lodging-house into something more permanent. We infer this from the fact that, though on the night of the census in February 1905 the Church Army had issued tickets for

beds in lodging-houses to 1,600 men, the actual number of persons who slept in these lodging-houses was 60 less than at the census of the previous year.

As may well be imagined, the people who sleep in common lodging-houses are neither strong nor healthy. The most respectable among them are for the most part unskilled labourers, whom physical weakness renders uncertain of obtaining work—the men who are taken on only when better men cannot be got. But, thanks no doubt to the fact that they are under such strict supervision, these lodging-houses are not the breeding-places of infectious disease that some people think. The total number of notifiable infectious diseases reported in common lodging-houses in 1905 was 14—the lowest total since the Council had the administration of the Acts dealing with these places. This total was made up as follows: Erysipelas, 7 cases; scarlet fever, 5; diphtheria, 1; and enteric fever, 1. Yet the death-rate in common lodging-houses is high, much higher than in London as a whole. And the chief cause of death is phthisis. In the average death-rate phthisis follows an age-curve. In the earlier stages of adult life the death-rate from it is low. In young men between 25 and 35 of all classes the rate is 2.47 per 1,000; in the next decade it rises to 4.12 per 1,000, and between 45 and 55 reaches its maximum of 5.04 per 1,000. Between 55 and 65 it falls again to 4.20, and over 65 to 2.13 per 1,000. But in the common lodging-house phthisis is fatal in an ascending line. Even in the earlier years it works more mischief there than among the mass of men, killing 6.22 per 1,000 between the ages of 25 and 35, in the next decade 10.02 per 1,000, in the next 18.84, in the next 19.83, while in those over 65 the mortality from it is set down as 21.16. Among the old men of the lodging-houses, however, the most fatal disease is bronchitis, which kills 50.12 per 1,000, as against 16.36 of that age among the population as a whole. The death-rate approaches most nearly to the normal in diseases of the circulatory system, and the statistics show that between 55 and 65 the ordinary mortality is rather higher than that of the common lodging-house, namely, 8.47 as against 8.39, but over 65 the ordinary mortality is 22.07, while that of the lodging-house is 26.73. It will surprise many to learn that alcoholism is not responsible for a great proportion of deaths, even though, in the tables, it is reckoned to include cirrhosis of the liver. Deaths from this cause are highest among the oldest men, but even then they reach only 2.23 per 1,000—rather more than double the mortality from the same cause among the general male population, it is true, but by no means such a large proportion as one might expect from the character generally assigned to the "dossier." Among the unfortunates who find the lodging-house the best home they can procure, are many decent enough men, who are, however, too stupid or too weakly to raise themselves above its dreary level. They are unskilled, and when the unskilled labourer begins to lose his strength he loses all.

The bulk of the frequenters of these lodging-houses are men, but the authorised accommodation includes also beds for 2,340.5 women—the half being equivalent to one child. Of these beds doubtless a good number are actually occupied by children. A lodging-house is not much of a home for them, but it is better than walking the streets. The same may be said of the accommodation for 308 married couples, but one cannot help noting with satisfaction that the popularity of this department seems to be decreasing. Still, there can be no doubt that the common lodging-house, unattractive as it would seem to most of us, is a necessity of our time, and one can only be glad that it is under the competent supervision of the County Council.

NURSING ADMINISTRATION.

DIFFICULTIES IN THE WAY OF NURSING REFORM.

AMONG all the difficulties which are blocking the way against nursing reform, incomparably the most serious is that of forming the Board or Council which would be charged with the duty of regulating the nursing profession. Nine-tenths of the reluctance which exists among the heads of the training schools to touch the question arises from their conviction that to have no central authority is better than to have the wrong central authority, and that as matters are there is no security that a really representative Board, such as would command their confidence, would be appointed. Such a Board, charged with the State regulation of nursing, would have the definite day imposed upon it of inviting nurses to come under its dominion. It would have power to fix the conditions under which it would consent to admit members to what would be constituted officially as the main body of the nursing profession, and to remove from this body any member who should be proved to have transgressed the regulations it was empowered to make in the interests both of nurses and of the public. Training schools which did not fit their nurses to become members of this body with its State cachet might find it difficult to get probationers, and might be compelled to modify their curriculum to suit the requirements of the Board. All this is exactly what is most to be desired. But there is a big element of risk. The training schools which are at present lukewarm, if not actually hostile towards reform, have themselves evolved the nurse in the course of the last 50 years. Step by step they have won their way, often in the teeth of overwhelming financial difficulties, towards a training system which, whatever its defects, can boast of producing incomparably the best trained nurses in the world. Is it surprising that they are reluctant to watch the control pass out of their hands to a body elected on lines which leave them without any security for its policy?

But, say the ardent advocates of change, the training schools must be coerced. When the Board is once constituted all these imaginary terrors will melt away, and they will begin to regard it as their best friend. It may be quite true that the proposed Board may, under whatever conditions elected, prove a far more reasonable body than some people anticipate. But it is undeniably true that, should the training schools refuse to support the Board, should they agree upon united action to ignore its provisions, it might remain an empty and somewhat costly shell, futile alike for good or evil. The rather acrid discussions on registration which have gone on for so long have cleared the ground from a great deal of foolish misapprehension on the subject. Nobody now hears anything about the compulsory registration of nurses, which used in old days to be the war-cry. Nobody talks of penalising trained nurses who may refuse to be registered, or untrained nurses who may refuse to be trained. All that has melted away

in the light of anticipated legislation. That the whole system must be purely voluntary is now universally recognised. The voluntary system has been tried already and has failed. The registration system of the Royal British Nurses' Association, framed expressly with the aim of conciliating the training schools, resting solely on the recommendation of the matron and the certificates of certain recognised hospitals, has failed to command the support of the great body of trained nurses. The reason was simply that the nurses have found themselves getting on very well without it.

Should the heads of training schools unanimously advise their nurses against accepting the State guarantee of their abilities offered by a Central Nursing Board, does anyone seriously believe that these nurses would fail to get employment? The tendency would undoubtedly be for the nurses whose qualifications were in any degree inferior, let us say veering on the minimum, to accept eagerly the offered seal of efficiency, but in the best Nursing Co-operations they would find themselves still at a disadvantage with regard to nurses trained in hospitals of world-wide repute which had combined to ignore the necessity for any guarantee but their own certificate. If the nurses of the best hospitals stood out of registration the public would be in the position of having to discriminate between the nurses who considered themselves too good and the nurses who would not admit that they were too bad, for registration; while the middle sort would be wondering what advantages they were getting for their guineas.

The movement in favour of the registration of teachers has been in progress for many years, and was grounded on the existence of evils with regard to incompetent teachers at least as far-reaching as the abuses complained of in the nursing world. In the result, about five years ago the register was opened under the direction of the Board of Education, and regulations were adopted for admitting teachers to the roll, and for recognising schools under certain conditions as training centres for teachers. But the teachers of assured qualifications, University degrees, and diplomas from the big training colleges, found no benefit from entering their names, and did not in effect do so; while the big public schools, with a few spirited and wide-minded exceptions, ignored the opportunity of being inscribed as "recognised." A short time back the register was suspended, and its ultimate future is very doubtful.

With these examples in view it will be seen that the principal, we might almost say the only, difficulty which blocks the way in nursing reform to-day is the constitution of a Board able to rely on the cordial co-operation of the large training schools without whose support legislation would be worse than useless

ECONOMY IN THE POOR-LAW INFIRMARY.

IT is one of the curious features of Poor-law administration that whereas in the present day the need for economy is the theme of the reformer, the main danger in years gone by was an excessive and cruel parsimony. The regulations of the Local Government Board are a standing protest in favour of the rights of the poor with regard to food, clothing, baths, bedding, air space, warmth, and light. The poor man is entitled to his minimum, and even in institutions which have wisely abolished the allowance system, in favour of practically unlimited rations, the inmate has the legal right to insist on having his portion weighed out before him, should he believe himself to be defrauded of an ounce of bread. The inference is that there is more danger that the pauper shall come short than that he shall be too lavishly treated, for there appear to be no regulations extant prescribing that the inmate shall cost so much and no more.

There is a very real and instructive contrast between the economy of the voluntary hospital and that of the rate-supported institution. They are alike in this, that they both spend public money. But in the one case the money is contributed as a free gift by an altruistic section of the community from their surplus income, and in the other it is levied without consent from a population, often themselves in want of the good things which are bought in their name. On the face of it the rate-supported institution would seem likely to produce the better results from the point of view of economy. But does this prove to be the case in practice?

The hospital manager is undoubtedly tempted to lavishness in expenditure of a kind which readily appeals to the altruistic subscriber. Whatever is new in the way of invention or research has a strong attraction for those who are making personal sacrifices for the good of mankind. Whatever is on the side of efficiency, whatever makes for the sparing of suffering, or the building up of the weak, is in the eyes of the voluntary giver a matter for unsparing liberality. Accordingly the hospital manager vies with other institutions in installing costly plant, or in inaugurating new and expensive modes of treatment. Yet his resources are strictly limited, and he is hampered at every turn by the difficulty of meeting a mass of humdrum expenses about which the ordinary subscriber is indifferent to the verge of impatience. To a man who is anxious to spend a thousand pounds on installing a new electric lamp it would be irritating to be told that the cost of boarding only fifty nurses runs away with a similar sum every year, and that on the whole the hospital would be thankful to spend his money in this necessary direction rather than show the newest thing in lamps for treatment. No hospital manager would ever suggest such a course to an enthusiastic giver. But the manager is forced in consequence to reduce his budget for necessities to the lowest point consistent with efficiency, and the wholly satisfactory result is apparent in the gradual reduction of domestic expenditure in hospitals year by year throughout the kingdom.

Now, the infirmary dare not advance too rapidly. Should the Guardians go beyond what is absolutely necessary for the bodily preservation of those under their care, they are confronted by a popular outcry on the part of those who are not only ignorant about the appliances and the skill necessary to restore the sick, but are resolutely indifferent. The main body of the ratepayers is essentially unaltruistic. Every step in the direction of more humane treatment of the sick—for the word "humane" in the present day cannot be realised without a good deal of expense—is won in the teeth of gigantic and stupid opposition, only justifiable when it is supported by a wide body of struggling workers barely able themselves to keep "off the rates." So far the tendency is to an economy which is in some directions of a deplorable character. But this is not all. There are many items in the budget of the infirmary which by the most parsimonious are admitted to be necessities, and which, as we have shown, the Local Government Board, as the true guardian of the poor, takes care shall not be lacking. It is in these items that the Guardians are at a disadvantage compared with the hospital manager. Their supply of money is not limited to what is contributed in any particular year, and they are not compelled to look about for economies in one direction to make up for expenditure in another. They can for necessary articles, such as bacon and bread, boots and fuel, requisition what they please, and since the ratepayer has no means of scrutinising the accounts, and no inclination to do so even if he had a chance, there is no motive for economy.

It is not necessary to conclude that Guardians as a whole are in any degree reckless about the general expenditure of the institutions they manage. Apart from such cases of abuse as are never wanting under any system, however good, the Guardians of the poor to-day are probably more enlightened and more penetrated with a sense of public duty than has ever before been the case in the history of local government. But there is no restraining force in the direction of economy in small things such as, in the case of hospital managers, has effected in certain large hospitals savings of £20,000 during the last three years. And as it is the interest of no particular person to economise, there is laxity backed up by ignorance all along the line. One fact illustrates very clearly the strength and weakness of Poor-law economy. The Poor-law infirmary is usually worked with a staff of nurses which, even taking into full consideration the chronic character of most of the cases, is little short of dangerous both to the nurses and to the patients. The proportion of patients to each nurse is from ten to twelve compared with the three or four of the ordinary hospital. Yet in the infirmary the cost of boarding the officials often works out at almost double the sum found sufficient for the board of the hospital staff, and the savings which could be effected in this direction alone would suffice to increase the nursing staff by one-third, and yet leave something over.

The Average Cost of Nursing Salaries per Bed.

"MATRON" suggests that the variation observable in the matter of nursing salaries per bed is due to the practice in certain hospitals of receiving paying probationers. It is not, however, usual to deduct the sums paid by paying probationers from the total of salaries, nor would this conduce to clearer finance. But the question of paying the first year probationers or receiving them without salary is one which does materially affect the averages. The London Hospital, for instance, which stands highest in its average for salaries per bed, receives 170 first year probationers, exclusive of paying probationers, and gives them a salary of £12 each. The Radcliffe, Oxford, which has the lowest average among hospitals with medical schools, receives no nurses without a premium, and pays no salary till the second year. Yet it is clear that this is not the whole secret of the difference, for both Guy's and the Middlesex, which pay salaries to their first year probationers, show as low an average per bed as King's or the Royal Free, which do not commence to give a salary till the second year. Among the provincial hospitals the Birmingham General Hospital, paying no salary to first year probationers, has an average of £5 ls. per bed, while the Leeds General Infirmary, Sheffield Royal Infirmary, and the Bristol General Hospital, which pay salaries from the beginning, show respectively an average of £4 6s., £4 7s., and £5 8s. per bed. The Royal Infirmarys at Edinburgh, Dundee, and Aberdeen all pay salaries from the commencement of training, and their average rate of salaries per bed is £4 7s., £5, and £5 7s. The number of the staff seems to remain the strongest factor in determining the average cost of salaries.

CORRESPONDENCE.

The Cost of Nursing.

In an article in your issue of April 6th reference is made to the cost of nursing at the various hospitals, and the London Hospital is referred to as being the most expensive in this respect.

It is stated—quoting from Sir Henry Burdett's latest edition of "Hospitals and Charities"—that each occupied bed costs £12 7s. a year in nurses' salaries. This figure is obtained by dividing our nurses' total salaries—namely, £9,377—by 741, the number of beds occupied. It is not a very important point, but is perhaps worth mentioning that this sum of £9,377 includes the salaries of about 50 nurses who have no bedside work at all. All the hospitals perhaps suffer from a similar disadvantage, as the "cost per bed" in nursing has been arrived at in the same way in every case; but the London suffers more in that its non-bedside work is greater as compared with its bedside work than most, if not all, the other hospitals.

In the article referred to attention is drawn to the very great difference in the "cost per bed" for nursing at the various hospitals, and it is stated

that as salaries paid to the individual nurses do not show this great variation, the difference in cost would appear to lie in the numbers. This is certainly true, but it is advisable that the public who support hospitals should know why there is such variation in the numbers. For instance, it is stated in Sir Henry's Annual that at the London there is one nurse to every 1.9 patients. This figure is arrived at by dividing 741, the number of beds, by 389, the number of nurses actually engaged at bedside work. The statement may be misleading.

Suppose, for instance, that at a particular hospital at a certain time there are 300 beds and 100 nurses, and that a year or two after there are still 300 beds but 150 nurses; it might be inferred that the figures simply show that the Board had decided to supply a nurse to every two patients instead of a nurse to three patients, as hitherto. The figures do not mean this, however. What they show, if figures can show anything, is that the Board considers that the nurse should work shorter hours, and in this hypothetical case two hours for every three she previously worked; not that she should attend fewer patients. Obviously, the shortening of the nurses' hours and lengthening of their holidays must increase the number of nurses employed at an institution.

Here every nurse gets three hours off duty, either in the morning or the afternoon—i.e., by daylight—the whole day off duty once a fortnight, and a whole month's holiday in the year. And this is why the London employs 389 nurses to 741 beds; certainly not because we think a nurse can only manage 1.9 patients when on duty.

Yours faithfully, E. W. MORRIS,
Secretary.

London Hospital, Whitechapel, E.
April 10th, 1907.

... As a basis of comparison between hospitals, the division of occupied beds among the ward staff works out very fairly. All hospitals are compelled to keep an extra staff for special cases, leave and off duty times, and it is precisely in the management of this extra staff that economy tells. The fact that day and night staffs are classed together in this mode of reckoning shows conclusively that the average number of beds to each nurse does not stand for the number which it is found she "can manage when on duty." To include the salaries of those engaged outside the walls in the average cost of nursing per bed may tend slightly to raise the average cost for hospitals with large out-patient departments, as compared with some small provincial hospitals. But as Mr. Morris points out, this is "not a very important point." In the first place, for purposes of profitable comparison, classification is essential. In the second place, the difference which the inclusion of the extra ward staff makes in the average is, in most instances, negligible. The London Hospital, for instance, when the salaries of the 50 nurses who "have no bedside work" is deducted, shows an average of £11 4s. per occupied bed for nursing, and is still higher for this item than other general hospitals, except St. George's, which shows an average for the total nursing staff of £12 2s.—
ED. THE HOSPITAL.

NEWS AND COMING EVENTS.

MR. PEARSON GREGORY has promised £7,000 towards the Grantham Hospital Endowment Fund.

THE Exeter Hospital Saturday Fund has been dissolved, owing to the lack of support which it has received during the last two years.

THE annual dinner of the French Dispensary will be held at the Hotel Cecil on Saturday night, April 30. The French Ambassador will occupy the chair.

AT the annual meeting of the Littlehampton and District Hospital, the investment of £200 was sanctioned, as the nucleus of an extension building fund.

FOUR wards comprising 64 beds of the Royal Victoria Hospital, Belfast, are standing empty at present, owing to want of funds.

SIR GILBERT GREENALL has been elected president of the Warrington Infirmary on the retirement of Mr. Parr, who has served as president of the institution for more than twenty years.

THE Sixteenth International Medical Congress will be held at Budapest from August 2 to September 4, 1909. The General Secretary of the Congress is Professor E. Grosz, M.D., 8 Esterhazy-utca, 7 Budapest, Hungary.

THE annual report of the Hereford General Hospital shows that during the past year careful inquiry has been made into the circumstances of out-patients. Several small improvements have been effected in the wards and buildings.

THE *Glasgow News* People's Shilling Fund in aid of the local Children's Hospital is making steady progress, and there seems every possibility that the £10,000 desired will be forthcoming. A noteworthy feature in the subscription list is the number of sixpenny and shilling donations.

"TAKING the average for the whole year," says the report of the Royal Boscombe and West Hants Hospital, "there were 36.6 beds occupied every night. This means that on many occasions couches and mattresses on the floor were in use to accommodate urgent cases, while the balconies relieved the pressure on space in the wards. . . . The hospital must continue to work at high pressure until its present accommodation is extended."

SHEFFIELD is badly off for hospital accommodation. It has at present only one hospital bed for every 831 head of population. It is therefore proposed to extend the Royal Hospital, at a cost of £30,000. An appeal, signed by the president, the Duke of Norfolk, has had a generous response. One contributor has offered £5,000 for the erection of a country annex, and a member of the committee has subscribed £500.

A SANATORIUM is to be built at Salterley Grange, an estate on the Cotswold Hills, near Cheltenham. The building will accommodate some 40 patients. The estate is a charming spot in itself, and it is in the midst of beautiful scenery, the Cotswold uplands in this district being particularly well wooded, and on it stands the famous tree known as the "Salterley Oak," supposed to be the oldest tree of the kind in Gloucestershire, local tradition giving it the age of 2,000 years.

THE memorial stone of the new buildings of the Glasgow Royal Infirmary will be laid on April 24 by H.R.H. the Prince of Wales.

MADAME GEORGE SPEYER, of Frankfort, Germany, has given £150,000 towards a fund for the "advancement of scientific research."

MESSRS. J. S. FRY AND SONS, LIMITED, makers to H.M. the King, have been appointed by special Royal Warrant manufacturers of chocolate and cocoa to their Majesties the King and Queen of Spain.

DURING the year 1908 the Royal Dental Hospital, Leicester Square, will complete the fiftieth year of its existence, and a sub-committee has been appointed to consider and report upon the advisability of issuing a special appeal for funds during the jubilee year.

LORD KINNAIRD will preside at the annual meeting of the Zenana Bible and Medical Mission, which will be held in Exeter Lower Hall on Friday, April 26, at 3 p.m. Among the speakers at the meeting will be the Hon. G. Kinnaird, who visited the hospitals and stations of the society last year.

HIS ROYAL HIGHNESS THE DUKE OF CONNAUGHT AND STRATHEARN has graciously consented to preside at the festival dinner which is to be held at the Princes Restaurant on Friday, May 10, in aid of the funds of the Middlesex Hospital. This dinner, it will be remembered, was to have been held last year, but, owing to unforeseen circumstances, suffered postponement.

H.R.H. THE DUCHESS OF ALBANY will lay the memorial stone of the new Infants' Hospital, Vincent Square, Westminster, on Thursday, May 2, at 5 p.m. This hospital is the first, and, at present, the only hospital in England exclusively devoted to the scientific treatment of the malnutrition of infants. It does not deal with surgical or acute cases of illness. The new hospital will contain 50 cots.

ON Monday afternoon the Prince and Princess of Wales visited the Royal Hospital at Richmond and opened the new "Swan" eye wards. The wards were built by Mrs. Benjamin Bousfield Swan, of Teddington, in memory of her late husband. They consist of a male and female division, together accommodating twelve patients, with attached operating theatre and side rooms. The extensions have cost £4,000, and Mrs. Swan has also given a further sum of £2,000 as the nucleus of an endowment fund. Before the opening ceremony, the Princess of Wales received a number of purses containing contributions towards the maintenance fund, ranging from five guineas to £1,000 given by Sir Max Waechter.

H.R.H. THE PRINCE OF WALES will open, on Tuesday, May 7 next, at four o'clock, the important extensions at Tottenham Hospital which have recently been carried out at a cost of £20,000. The extension of the hospital has been undertaken as an absolute necessity owing to the large and thickly populated district which it serves. Her Royal Highness, the Princess of Wales, has kindly consented to receive purses containing £5 or upwards, in aid of the funds, and it is hoped that these, together with a list of special contributions which will be announced at the opening ceremony, and the collection taken upon the occasion, will materially help in reducing the debt of £8,000 which has been accumulating during the past six years.

GENERAL PRACTITIONERS' CONTRIBUTIONS.

Important.

WE propose to devote a special page to General Practitioners' Contributions. We therefore invite from practitioners contributions based upon their experience in the management of cases, and in the treatment and diagnosis of disease; especially shall we be prepared to welcome articles dealing, practically, with treatment, and with the use and value of new remedies and methods.

No article should exceed 1,100 words in length, and, if accepted, one guinea will be paid to the writer after publication. Each communication should be accompanied by a stamped directed envelope for the return of the MS. if found unsuitable. See coupon on Special Supplement.

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Contributions.

Contributions should be written, or preferably typed, on one side of the paper only, and all articles sent in are accepted upon the distinct understanding that they are forwarded to THE HOSPITAL only.

Correspondence.

Correspondence on all subjects is invited, but no communication can be entertained if the name and address of the correspondent are not given as a guarantee of good faith, but not necessarily for publication. All correspondents should write on one side of the paper only.

Books for Review.

Publishers are particularly requested to send advance proofs of any new books of importance, whenever possible, as the Editor has made arrangements to publish immediate reviews, and on a new plan.

The Relaxations of Medical Men.

We shall also be glad to pay for accepted contributions, from any member of the profession, on the subject of the relaxations of practitioners. This opens up a wide field, as it includes natural history, photography, sport, indoor recreations, and motor-ing. Whenever possible, original illustrations and photographs should be sent with the MS.

Suggestions Invited.

The Editor will welcome suggestions for the establishment of any new section in THE HOSPITAL, and will be glad to supply information on any subject of interest or importance to members of the profession in any part of the world.

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THE HOSPITAL

April 20, 1907.

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The Hospital

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The Medical Sciences and Hospital Administration.

NEW SERIES. NO. 4, VOL. I. [No. 1076, VOL. XLII.]

SATURDAY, APRIL 27, 1907.

THE DUTIES OF ROYALTY.

MEDICAL Institutions, and especially Hospitals, in this country in the present day owe more to the Royal Family of England than it would be easy to express in words. Her Majesty, the late Queen Victoria, although the fact was not generally recognised, took the keenest interest in the suffering and the sick, and in all institutions for their benefit. We can go back nearly forty years to the day, when we first had occasion to realise Queen Victoria's interest in the hospitals. Her late Majesty used to watch the progress of various institutions for the sick, and she would spontaneously take occasion to intimate her satisfaction, where she considered the work had been exceptionally well done. On one such occasion she caused a letter to be written, in support of a hospital of international interest, which was so emphatic that the late John Delane, as Editor of the *Times*, thought it prudent to make direct inquiries as to its authenticity, before its publication. No doubt, this keen interest in the welfare of the sick is one great reason why Queen Victoria will ever be beloved as the Mother of her people.

King Edward VII. when Prince of Wales, as the history of his public life proves, never hesitated to render personal service in the cause of the sick. During the last twenty years few men have done as much as His Majesty, by personal service, in this direction. The establishment of King Edward's Hospital Fund for London and of the League of Mercy, the services he rendered to Guy's Hospital, and the success which has attended these movements, owing largely to the King's personal interest in, and work for the sick, will go down, through the ages, as some of the brightest and best work which a monarch has ever done.

Glasgow during the present week has been *en fête*, and during seven hours of three working days, the Prince and Princess of Wales have given themselves up to ceremonial, social and public functions, to an extent which is marvellous from the volume of energy expended and remarkable for the spirit which underlies the devotion to duty which it represents. As President of the King's Fund and of the League of Mercy, the Prince of Wales gladly devotes a definite amount of time, and all his energy and

attention at such periods, each year, to work for the sick. The Princess of Wales has identified herself to a large extent with the children, and she yields to no one in her devotion to the public duties which devolve upon her from time to time. We have no doubt that the Medical School of Glasgow will greatly benefit by the visit of the Prince of Wales to its University, on Tuesday, and by the interest he displayed in its work and welfare. We can well believe, however, that the Prince felt an especial interest in Wednesday's proceedings, because he then laid the foundation-stone of the Royal Infirmary, situate in the Gatehouse Block, which marks a new departure in hospital construction, and will probably constitute a new unit. The Glasgow Royal Infirmary, if erected from the accepted plans as they stand to-day, despite the limitations of its site, and the difficulties which have had to be overcome, will certainly constitute one of the most interesting of modern hospitals. Unfortunately, some eight years must elapse, before the whole of the reconstruction, now commenced, can be carried out in its entirety. We hope the wiser heads amongst the Managers, and the general sentiments of the architectural profession, backed by the just pride of the citizens of Glasgow, will prevent, during these eight years, any fussy interference, or ill-considered tinkering that may mar the excellence of the plans, as they stand to-day.

The Prince of Wales is an able critic, and a keen inspector of hospitals and their work. Not only is it an honour, but a very real help to trained administrators in charge of a great hospital, that such an institution should be visited by His Royal Highness. Like his parents, the Prince has a trained eye for efficiency, and wherever he goes, this most useful faculty is apt to leave its mark in results. We hope the inhabitants of Glasgow and the people of Scotland will appreciate the generosity in hard work which their Royal Highnesses displayed, during their recent visit. We believe that this visit will be memorable in the history of such events, from the fact, that never before has any city received such a volume of personal service from Royalty, as that rendered to the citizens, institutions, and interests of Glasgow, by the Prince and Princess of Wales, during the current week.

MEDICAL DEFENCE OR PROTECTION SOCIETIES.

THE responsibilities involved in medical practice are so numerous and touch so many interests, that, at times, questions must almost inevitably arise which involve legal controversies and disputes. Such disputes may occur either between different members of the profession, or between a medical practitioner and some private individual or public body. In either case, the persons immediately interested will certainly need advice, based alike upon common sense and technical knowledge. It is therefore fortunate, from the point of view of the medical profession, that organisations have come into existence capable of meeting these wants. These organisations are founded upon the principles of mutual insurance and co-operation, so that the risks of the individual are spread over a relatively large membership. Hence, for a small annual subscription, any practitioner may have at his disposal, in time of need, the moral and material support of an experienced organisation. Judging, however, from existing facts, it would seem that many members of the profession fail to appreciate these advantages, with the result that they leave themselves unprotected from certain manifest risks, while, at the same time, the organisations in question are not so strong and influential as would otherwise be the case. It seems so obvious that in disputes involving medical questions the practitioner immediately interested would be immensely helped by association with his fellows, that we venture to suggest to any of our readers who have hitherto failed to do so, the advisability of at once becoming a member of one or other of these medical defence or protection societies. Both the London and Counties Medical Protection Society, and the Medical Defence Union, enjoy the highest professional sanction, and are conducted, under such sanction, by capable and experienced officers. It is perhaps to be regretted that there should be any rivalry in this field. But with this we are not concerned. Our immediate regard is the interest of the individual practitioner, and our claim is that this needs the help and advantages that can be secured by membership of one or other of these organisations.

There is no need to recite the special legal risks which are attached to medical practice. Charges of malpractice, attempts at blackmail, and the like, find their way every now and then into the public prints, and thus, apart altogether from direct experience, every practitioner ought to be aware of the dangers to which he is exposed. But to trust to chance is so large an element in human nature, and it is so easy to believe that misfortune and difficulty are for others rather than for oneself, that many

take the risk rather than provide for the chance of its active development. Hence it repeatedly happens that a practitioner finds himself involved in a serious legal dispute without the assistance and support which the payment of a small annual subscription would have secured ready to his hand. He may be, and indeed in such circumstances is usually proved to be, entirely free from legal and moral blame. Yet he has to pay a severe penalty in the shape of natural anxiety and often, also, in the shape of a bill of costs, from which he would have been saved, at least in a large measure, had he only in due time exercised a proper degree of prescience. It is true that in circumstances such as those just alluded to the profession often comes to the rescue with a subscription list. But this cannot be counted on, and even when it occurs the practitioner concerned occupies a much less dignified position than that which would have been his due had he merely received corporate assistance as a right secured to himself on the basis of insurance and mutual protection. Again, short of serious legal disputes involving a trial in open court, there are many circumstances in which the practitioner may gain great help from membership of one or other of the defence organisations. Difficulties with fellow practitioners, with individual patients, or with public bodies, are often allowed to grow into dangerous proportions for want of a little tact in their early stages. And here, advice from those who have almost daily experience of such difficulties is of immense value. Further, to attack an individual practitioner seems to a certain type of person a comparatively simple and secure proceeding, but the matter takes on a very different complexion when it is known that the attack will be met with all the resources and prestige of a powerful and experienced organisation. Membership of such a society, therefore, not only secures financial and material support; in addition, it is a protection against unjust demands and false charges.

To promote the success of these defence organisations is, we will venture to suggest, one of the responsibilities that may be fairly placed on all those who have influence with the profession. Especially can a claim in this direction be pressed on the teachers in our medical schools, and more particularly on the teachers of medical jurisprudence. To these there come many opportunities of pointing out the legal risks and dangers which attend medical practice, and it thus falls to them to indicate how these risks and dangers may be most efficiently met. In our view, no medical student should leave his hospital or college without a strong recommendation to join a medical defence society.

ANNOTATIONS.

Dr. John Carswell.

THE sympathy of the entire profession will be freely extended to Dr. J. Carswell in connection with the dastardly outrage of which he has been the victim. It may be remembered that some twelve months ago Dr. Carswell, in association with Dr. Marion Gilchrist, certified as insane a certain Wm. Purves, who, on the certificates granted by the doctors, was for a time confined in an asylum. On his release Purves brought an action for damages against Dr. Carswell and Dr. Gilchrist, and, after a prolonged trial in the Court of Session, a verdict was given entirely exonerating the defendants. As has been the case in other similar instances, it was not possible to recover the costs from the unsuccessful suitor, and as a necessary result each of the medical practitioners concerned had to pay a solicitor's account amounting to several hundreds of pounds. To this penalty for the honest discharge of professional duty undertaken for the protection of the public, Dr. Carswell has now to add the suffering and risk of an attack on his life. Just as he was leaving the hospital on the 16th inst. he was shot by Purves, who had evidently been waiting in the neighbourhood for this purpose. It is only by some strange good fortune that the result was not immediately fatal, as the revolver was used at close quarters, and no fewer than three bullets were lodged in Dr. Carswell's body, one of these just missing the left femoral artery. We are glad to know that so far Dr. Carswell is making favourable progress. Our readers will join us in an expression of sincere sympathy, and in the cordial hope that he will make a rapid and complete recovery. There is much to be said about the state of the law relating to lunacy in Scotland, but this is not, perhaps, the best time to say it. The public must, however, realise that responsibilities undertaken for its safety demand some protection for those on whom the immediate duty falls.

Mercury in Modern Therapeutics.

A RECENT discussion on this subject at the Liverpool Medical Institution seems worthy of general attention. The crowd of new remedies, pressed on the profession nowadays by all the resources of ingenious and persistent advertisement, is so great that there is danger of many of the older drugs being largely forgotten. This danger is particularly great in reference to younger practitioners, who have but a scanty stock of personal experience, and some of whom, at all events, manage to acquire the conviction that, apart from a pharmacological justification, no reputed remedy is worth discussion. It is well, therefore, that the experienced clinical physician should make his voice heard, and hence Professor Wm. Carter's paper, in opening the discussion above referred to, is particularly welcome. Apart from the treatment of syphilis, Professor Carter says frankly—and we doubt not with perfect accuracy—mercury is far too much neglected as a therapeutic agent. Even to those who will only

heed the results of laboratory experiments his display of the power of calomel to prevent or correct the decomposition of bile must strongly appeal. Such a demonstration, too, is not far removed from what must actually occur when calomel is given by the mouth. For the insolubility of calomel in the stomach permits it to reach the duodenum unchanged, and so to come into immediate contact with the bile and the pancreatic juice, over both of which, as can be shown *in vitro*, it exercises a decided antiseptic action. Doubtless it has a similar effect on many of the toxins which in various conditions are formed in the bowel, and the absorption of which is responsible for many sensations indicative of ill-health. In chronic cardiac disease, in meningitis, in peritonitis, mercury has a large field of utility, and many a practitioner may find it well-spent time to consult some of the older works on materia medica rather than to occupy himself with the ingenious catalogues of the modern advertising chemist.

Medical Facts and Figures in Lord Cromer's Report.

It is hardly possible to refer to Lord Cromer's official report without at least a passing word of tribute to the long, efficient, and patriotic services which this great public servant has rendered to Egypt and to the cause of humanity. Profound regret will be felt in this country that, as a result of ill-health, these services, but by no means their results, have necessarily been brought to a conclusion. The report in question contains a number of facts and figures which have a special interest to medical readers. Of immediate official work is to be noted the Anti-rabic Institute which, during the eight months over which its operations extended, treated 451 patients, of whom only four died of hydrophobia. There have yet to come the more radical preventive measures which have proved so successful in this country. Sir Ernest Cassel's ophthalmic hospitals, now under Government control, treated during the year some 7,000 new patients, among whom, of course, was a large proportion of the affections of the eyelids and conjunctiva for which Egypt is notorious. Regret is expressed that numerous demands in other directions render it impossible at present to replace the Kasr-el-Ainy Hospital at Cairo by a building more in harmony with modern methods. The Government Medical School appears to have well established its popularity, as the entries for the year numbered 97, though only 23 of the candidates could be admitted; the staff has recently been increased, and may now claim to be fairly complete. Three large hospitals are under construction in the Soudan, and a dispensary for sick children, supported by voluntary contributions, has been opened in Cairo. Accommodation for lunatics has also been increased; it appears that many cases of insanity originate in the use of hashish, large quantities of which, in spite of Government prohibition, are imported. Altogether the report has a very wide and varied medical interest.

MEDICAL OPINION AND MOVEMENT.

A *propos* of hospital abuse and the recent endeavours in this country to restrict it, it is interesting to note that similar troubles are also encountered in the hospitals of Paris. The Board of "Assistance Publique" has just published a notice that consultations in the hospitals and dispensaries are reserved exclusively for patients without any means, the necessitous or indigent. Everyone applying to the hospital must prove by a card from the "Bureau de Bienfaisance," his identity, his residence in Paris, and his poverty. Apart from urgent cases, the doctors and the administrative officers should refuse medical attendance to anyone whose profession or address does not indicate poverty and a right to gratuitous attention. The Board will make domiciliary visits to verify the declarations of patients and will prosecute for the recovery of expenses and for the repression of abuses.

In a paper entitled "The Alleged Increase of Insanity," Mr. Noel A. Humphreys has endeavoured to solve the problem whether there is an actual increase of insanity in the community. The question is considerably hampered owing to the incompleteness of the returns of the Lunacy Commissioners on certain important points, such as the proportion of first admissions to asylums which have already been reported upon as living in workhouses or with relatives. Nevertheless, his conclusions are reassuring. He is able to show that two important factors are largely and probably entirely responsible for the continual increase in cases of certified insanity. These are, the increasing tendency to draw on the reserve of mental unsoundness hitherto outside the aggregate of actually certified cases, owing to an increased stringency in the standard of mental soundness; and the accumulation of the insane owing to the diminished death-rate and the prolonged stay of patients in the asylums.

A CASE of considerable medico-legal interest has recently been decided in France by the First Chamber of the Civil Tribunal. The plaintiff, a certain Madame Dury, entered the Hospital Lariboisière to undergo an operation upon the right kidney. The surgeon performed, however, a supra-vaginal hysterectomy. The patient sued the chief surgeon, Dr. Hartmann, and his assistant, Dr. Lecène, for 10,000 francs damages, on the ground that the operation was performed by the assistant instead of by the chief surgeon, Dr. Hartmann; that it was done without the consent of her husband; and that it was a different operation from what she had agreed to, and in her opinion quite unjustifiable. The Tribunal gave judgment for the defendants. It is probable that this judgment will be appealed against and the case taken to a higher court. In a case decided before the English courts, a nurse agreed to undergo laparotomy for removal of an ovarian cyst. In the course of the operation the surgeon performed total hysterectomy with removal of the appendages. The patient brought an action against the surgeon and obtained heavy damages.

THE last meeting of the Clinical Society was productive of some very useful and interesting papers. Mr. Lawrie McGavin brought forward his method of filigree implantation for the cure of cases of very large or recurring inguinal hernia. The author has already identified himself with the subject by his successful treatment of large abdominal hernia by Bartlett's method of filigree implantation, and he now appears to have been equally successful in its application to inguinal hernia. At the same meeting Mr. G. H. Makins and Mr. Percy Sargent gave the results of the treatment of twenty-five cases of acute appendicular peritonitis by injections of a multivalent serum prepared from different strains of bacillus coli. The serum was prepared by Dr. H. H. Dale by inoculations of a horse with the strains separated by Dr. Dudgeon from different cases. Eight strains were taken from cases of puerperal fever and seven strains from cases of peritonitis, and other strains of unknown origin were also injected. In all cases the cultures injected were killed by the addition of 0.1 per cent. chinolol. The twenty-five cases treated were all of a severe type. Nine of these, or 36 per cent., recovered. It is further stated that marked improvement occurred in all, the toxic symptoms abated, the infected area became localised, and in the fatal cases the end was delayed beyond the usual period of the disease.

THE house-fly has for some time past been regarded with serious suspicions by the sanitarian, and, in view of our knowledge of the spread of tropical diseases by the winged insects of the warmer climates, it has become increasingly probable that the house-fly is also responsible for the dissemination of infectious diseases. The bacteriologist to the Govan Town Council has been carrying out a series of experiments to ascertain the infective capacity of the fly. Flies were made to crawl over freshly prepared agar-agar contained in sterile Petri dishes. The dishes were then placed in an incubator at the normal temperature of the body, and at the end of twenty-four hours numerous colonies of micro-organisms appeared on the surface of the media. These micro-organisms were found on microscopical examination to be such as are associated with the presence of sewage and decomposing organic material. The question arises whether the summer diarrhoea of children may not be in a large measure due to contamination of the milk in this way by flies. This question is receiving the serious consideration of the Health Committee of Liverpool. At their instigation Professor Ronald Ross is investigating the life history of flies, especially with a view to ascertain their breeding place. One of the most important measures to restrain their activity is the removal of all decomposing refuse as rapidly as possible from the dwelling. Ash-pits should be replaced by proper sanitary bins, and people should be taught the necessity of burning all domestic refuse liable to decomposition and putrefaction.

HOSPITAL CLINICS.

THE MODERN TREATMENT OF SYPHILIS.

By D'ARCY POWER, M.A., M.B. Oxon., F.R.C.S. Eng., Surgeon to and Lecturer on Surgery at St. Bartholomew's Hospital.

For all practical purposes syphilis appeared in Europe as a new disease in 1494, though it had long been recognised in the New World. The Spaniards who sailed with Columbus in his first voyage became infected, and introduced it into the Old World at a convenient opportunity for its wide distribution. John of Vigo (1460-1517), writing as a contemporary, says: "In the yeare of our Lord 1494, in the monethe of December, when Charles the French kynge tok hys journey into the partes of Ytaly, to recouer the kyngdome of Naples, there appeared a certayne disease throughout all Ytaly of an unknown nature, which sondry nations hath called by sondry names. The Frenchemen call it the dysease of Naples, bycause the souldyers brought it from thence into Fraunce. The Neapoloitanes call it Frenche dysease, for it appered fyrste when they came to Naples, and so other languages call it by other names." In the end it became known as *Morbus Gallicus*, which the common people shortened to *Morbus*. The now familiar name of Syphilis was given to it, or at any rate the word was rendered familiar, by the widely read poem "Syphilis, sive *Morbus Gallicus*," written by Jerome Fracastoro, who was born at Verona about 1483. The first mention of the word occurs in the following lines:—

*Syphilus (ut fama est) ipsa haec ad flumina pastor
Mille boves, niveas mille haec per pabula regi
Alcithoo pascebat oves.*

(The story runs that Syphilus, a herdsman, tended by these streams a thousand oxen, and in these meads fed a thousand snow-white sheep all belonging to King Alcithous.) It is remarkable that no medical writer before 1500 even hinted that syphilis had any connection with "the syne of venerie," though the fact was shrewdly suspected by the Town Council of Aberdeen as early as April 21st, 1497, on which day "it was statut and ordanit by the Alderman and Council for the eschewin of the infirmitey cumm out of France and strange partis that all licht women be chargit and ordanit to decist fra their vices under the payne of ane key of het yron on their cheekis and banysene of the toune."

SYPHILIS IN THE MIDDLE AGES.

It was partly owing to this ignorance of its origin and partly from the lax morality prevalent at the end of the fifteenth century that no great moral turpitude attached to the disease on its first appearance. Benvenuto Cellini, the Florentine goldsmith (1500-1570) says that "in Rome this kind of illness is very partial to the priests, and especially the richest of them." He tells us that it was at first treated in the native American manner with *guaiaacum*, and that the methods of fumigation and inunction with mercury were originally employed at Rome by Giacomo Berengario da Carpi. These methods had no great success. He only undertook a cure after stipulating for fees which he reckoned not by tens but by hun-

dreds of crowns. "He was a person of great sagacity," says Cellini, "and did wisely to get out of Rome, for not many months afterwards all the patients he had treated grew so ill that they were a hundred times worse off than before he came. He would certainly have been murdered if he had stopped." His method consequently fell into disrepute, and, speaking in another part of his autobiography, Cellini says "that Charlatan Maestro Jacopo, the surgeon from Carpi, came to Rome and spent six months there, during which he bedaubed some scores of noblemen and unfortunate gentlefolk with his dirty salves, extracting many thousands of ducats from their pockets, and at the present moment in Rome all the miserable people who used his ointment are crippled, and in a deplorable state of health."

From the time of Berengario until the present day mercury has been used in the cure of syphilis, at first empirically, because syphilis was thought to be allied to certain skin diseases for which mercurial ointments had been prescribed; afterwards blindly, because it had been the custom to treat syphilis with mercury; only recently with discretion, because it is recognised that by mercury alone can syphilis really be cured.

It seems presumptuous at first sight to speak of the modern treatment of syphilis when one has nothing but mercury to offer, and mercury has been used for at least four hundred years in every part of the civilised world where syphilis has been present. But mercury has been abused both in the amount given, in the method of administration, and in the concomitants and adjuvants, until it fell into such disrepute that there are still many persons who have inherited an instinctive horror of the drug. When mercury was given in the earlier days the patient was first prepared by bleeding, enemata, frequent bathing, prohibition of wine and all nourishing food. He was then shut up in a closed room, the windows of which were never opened during the cure, the room being heated and the mercury rubbed in whilst the patient stood before a roaring fire. After each inunction the parts were covered with tow or wool and the patient was put into a warmed bed and covered with thick bed-clothes to make him sweat freely. The cure lasted from twenty to thirty days, and during this time the linen was left unchanged, lest any of the mercury should be lost. Very little food was given, soups, beef-tea, the yolks of eggs, and rice, forming the staple, whilst quantities of drugs were given to evacuate the evil humours. Even as late as 1753 Boerhaave, the great Dutch physician, ordered enemata every four hours. The effect of this treatment was to cause severe salivation, and it is marvellous that any of the patients recovered. "A good salivation" was one in which the patient produced five or six pounds of viscid saliva in twenty-

four hours, and this salivation was sometimes maintained for thirty or forty days. During the last hundred years these auxiliaries to treatment have one by one disappeared. There is still perhaps faith in diet, and many hold it as an article of belief that syphilis cannot be cured unless the gums "be touched," as it is called, or, in other words, unless the patient has been salivated. But they have thought so little about the matter that when once this point has been reached they are satisfied; and, because there has been some stomatitis, and the patient has been cured of his present symptoms, he is allowed to leave off any further treatment.

Emphasis is now beginning to be laid upon a feature of syphilis which has long been known—namely, that it is a disease of very long duration, marked by periods of remission and periods of exacerbation. There is a slight tendency towards spontaneous cure under the most favourable conditions of health in any given patient, but in the majority of cases the disease merely lies dormant, ready to manifest itself on every occasion when the general health becomes undermined or in any way reduced, whether by accident or from such natural causes as senile changes advancing more rapidly in one organ than another. There is very little doubt that over-exertion of a part or of a tissue will render it more liable to syphilitic inflammation than if it be maintained in a normal condition. It is further recognised that in the great majority of cases syphilis can be cured so completely that the affected parent will be capable of producing healthy children.

THE PROPHYLAXIS OF SYPHILIS.

The present knowledge of syphilis teaches that every patient must have an initial lesion at the seat of inoculation, and that for a short time it is a local disease. During this period it can be attacked at the seat of lesion and the disease arrested; but it quickly becomes generalised, and is then beyond the reach of topical remedies.

Dr. Paul Maisonneuve, working with Metchnikoff and Roux in Paris, has recently published an interesting thesis on the prophylaxis of syphilis, in which he shows that, as in the case of vaccination, the inoculation of syphilis is effected better through a scarification or slight superficial wound than through one which involves the deeper layers of the skin. At first syphilis remains as a local infection, and it can then be treated locally, just as a poisoned wound can be disinfected immediately after it has been produced. The experiments on apes and a chimpanzee show that the interval between the inoculation and absorption of syphilis is short, but measurable; and if mercurial applications be made during this interval, the further manifestation of the disease can be prevented, for the poison is thereby destroyed. Indeed, so certain are the French pathologists of their power to arrest the general infection of the body by local means that they allowed Dr. Maisonneuve to be inoculated with syphilis. At the end of an hour the inoculated places were treated with an ointment of calomel, and no further signs of syphilis appeared, whilst the control animals who were inoculated simultaneously developed chancres in due course. Al-

though the syphilitic infection in this particular experiment was arrested in an hour to avoid any chance of the disease developing, there is reason to suppose that the local application of a mercurial ointment will hinder syphilis as long as eighteen hours after inoculation. If such a result is verified by further experiments, the knowledge will prove of the greatest service to those who are likely to contract the disease in the course of their professional work, and such people are dentists, doctors, and midwives. The ointment employed is made by rubbing up mercury and lanolin in the proportion of 1 to 10 by weight, and the ointment must be rubbed into the inoculated place for at least ten minutes.

TREATMENT OF EARLY SYPHILIS.

These experiments dispense at once with the bad system of waiting, in cases of syphilis, until the appearance of secondary symptoms "clears up the diagnosis." When the primary sore appears it is too late to act on the syphilitic poison by any local means, for by this time it has become generalised; but mercury destroys the virus or its cause, and the sooner it is given, the more likely is the patient to be relieved of further symptoms. Hitherto it has been withheld, because it was thought necessary to give large doses and to carry the effects to an extreme. So far as is known scientifically, small doses alone are required, but they must be continued for long periods of time. The salivation of patients during a mercurial course for the treatment of syphilis should be considered as great a reflection on a surgeon as the occurrence of suppuration in one of his operation cases.

The modern treatment of syphilis aims at treating the disease and not merely its symptoms. Yet, in spite of this knowledge, English practitioners are nearly all "opportunists," that is to say, they treat the symptoms as they arise, but when once the rash, the mucous patch, the sore throat, or the falling hair has been cured, they are content to let the patient go untreated until the appearance of fresh signs compel him to seek advice again.

The proper and only means of curing syphilis is a prolonged course of mercury from the time the patient is first seen until the time of the secondary manifestations is well over, and for empirical purposes this is taken to be one year from the period of infection. The patient may occasionally have a rest from treatment, and the form in which the mercury is given may be changed. Personally, I prefer the administration of grey powder for private patients, and the injection of Colonel Lambkin's mercurial cream for hospital patients. When mercury is given by the mouth it is stopped for three days at the end of each month and for a fortnight at the end of every third month, tonics or cod-liver oil and maltine being taken in the intervals. It is often necessary, too, to suspend the administration or reduce the dose for a day or two on account of trifling digestive disorders; but so long as the weight of the patient is maintained and he appears to be improving in general health, the dose of mercury should be steadily continued.

The simpler the preparation of mercury used the

more satisfactory are the results in the treatment of syphilis. Hardly a week passes in which some new mercurial compound is not brought into notice with a flourish of trumpets worthy of Andrew Boorde or the other sixteenth century quacksalvers. The fundamental error in connection with these preparations is that they are mere mixtures, and are not chemical compounds, so that there is no certainty of their composition being identical at different times, or with different samples. The prescriber does not know, therefore, what quantity of mercury he is giving, nor in what form.

TREATMENT OF LATE SYPHILIS.

The administration of iodide of potassium is too often relied upon exclusively for the treatment of tertiary or gummatous syphilis. It is, indeed, excellent, but it should be remembered that it only removes the products of syphilitic inflammation in the same manner as it removes the products of other chronic inflammations, whether they be rheumatic, cancerous, or actinomycotic in origin. Mercury will produce the same results as iodide of potassium in the tertiary lesions of syphilis, but mercury acts much more slowly. It is, however, curative, and the appearance of gummatous inflammation in syphilis shows that the disease is still active, though in a chronic and perhaps attenuated form. Logically, therefore, a course of treatment by iodides should always be followed by, or associated with, the administration of mercury. Too much must not be expected of the iodides apart from their action on newly formed inflammatory tissue. They possess the power of acting upon the mononuclear leucocytes, which are so numerous in syphilis, and thus cause the absorption of the new and imperfect connective tissue so long as it is cellular in character; but they have no action on fully formed fibrous

or scar tissue. But the very word "absorption" is merely used for convenience, since no explanation is yet forthcoming about the manner in which the iodides cause the disappearance of newly formed connective tissue.

It was formerly the practice to give five or ten grain doses of potassium iodide three times a day for many months. It is now usual to give larger doses of fifteen to thirty grains at a time for a week, and then to replace it by a tonic mixture containing iron, nux vomica, and dilute phosphoric acid for another week, the iodide being again given as before. The body is thus prevented from becoming used to the circulation of iodides through the tissues, and better results are obtained in the treatment of tertiary syphilis. The larger doses of iodide are conveniently given dissolved in some effervescing mineral water at meal times.

The modern treatment of syphilis has resolved itself into a cure of the disease by the use of mercury in its crudest form and stripped of all the adjuncts which were formerly thought to be essential to its success. This change of plan is the result of an extended study of experimental pathology which has shown the part played by micro-organisms in the production of disease. Syphilis, by all analogy, ought to be caused by a micro-organism, and some of the best pathologists of the present day believe that the micro-organism has been already discovered in a particular variety of spirochæte named after its discoverer the spirochæta of Schaudinn, or more specifically the *Spirochæta pallida*, an actively moving protozoon, which differs from the *Spirochæta refringens*, a coarser form, which is not uncommonly found on the mucous membranes of healthy persons. It is too soon, as yet, to make any dogmatic statement, but evidence is accumulating daily to show that the secret of the syphilitic virus is at length discovered.

THE TREATMENT OF HIGH BLOOD-PRESSURE.

At a recent meeting of the Therapeutical Society Dr. George Oliver gave some results of his clinical observations on the management, by diet, baths, electricity, and internal remedies, of a persistent rise in the arterial pressure. He pointed out the value of a non-stimulating, and especially of a lacto-vegetarian and salt-free diet; of a minimum proportion of calcium salts in drinking water; of warm massage douching; of saline and carbonic-acid baths; of D'Arsovalisation and the electric light and ozone baths; of warm equable climates (Jamaica, India, and Egypt); of evacuant treatment; of asepsis of the bowels; and of depressor remedies. He indicated some practical suggestions furnished by physiology in the selection of depressor remedies for more or less continuous use, and stated his favourable experience of the benzene derivatives. At the same time he showed that our control is limited to cases in which the rise is moderate and the vaso-motor play of the peripheral arteries is not seriously impaired. In the discussion which followed, Sir Lauder Brunton said that with perfect

rest, vegetarian diet, and the steady use of nitrites, even cases of exceedingly high tension might be successfully treated. A salt-free diet might be useful, but it could not be continued for a length of time, as it is so irksome, although salt might to a considerable extent be replaced by sugar in the dietary. The modern treatment of high tension by nitrites and nitrates had been recommended by Lord Bacon. The nitre Bacon employed probably contained a quantity of nitrites; and blood-letting was a remedy which had fallen too much into disuse, and might be employed again with advantage. Dr. Herbert French said cases of very high blood pressure occurred even amongst those who were at the same time vegetarians, non-smokers, and life-long abstainers. Dr. Oliver, in reply, agreed that rest in bed would diminish the high blood-pressure even in the worst cases, but this was owing to a diminished call upon the cardiac end of the circulation. In those who were obliged to work, the ventricle-factor could not be diminished, and such cases seldom reacted to depressor drugs so long as the patient remained up and about.

PATHOLOGY IN GENERAL PRACTICE.

The Demonstration of Tubercle Bacilli and other Acid-fast Bacilli.—(Continued.)

THE diagnostic importance of the presence or absence of such bacilli in the sputum of respiratory cases is very great. Where tubercle exists in the lungs, and necrosis and breaking down of the tissues has taken place, then bacilli will be found quite easily; on the other hand, in obsolete tubercle of the apices, in some cases of miliary tubercle where breaking down has not commenced, and in tubercle of the pleura with no lung involvement, they will be absent. In any suspicious case three or four examinations on different days, preferably of the sputum coughed up in the early morning, should always be made, and if after this the result is negative a revision of the diagnosis is necessary. The mere presence of blood in a sputum, though suggestive, does not, of course, always mean that tubercle is present; such a condition may be caused by malignant disease of the lung, either primary or secondary, and also is common in cases of severe mitral stenosis with congestion of the lungs. An illustration or two will explain this more fully. A case with severe hæmoptysis and emaciation showed, on repeated examinations, no tubercle bacilli in the sputum; the diagnosis then veered round to "probably malignant disease," and this was eventually verified at the autopsy, the case being one of sarcoma of the supra-renal capsules with metastatic deposits which had undergone necrosis and breaking down, in the left lung. Again, a case exhibited blood in the sputum, which was very profuse and purulent, marked dullness all over the upper part of the right side of the chest, wasting, and eventually paraplegia, while no tubercle bacilli could ever be detected in the sputum. At the autopsy the condition was primary cancer of the lung with metastases in the spine. Every case of doubt must be carefully examined, and the test as a routine one must be constantly used.

LEPROSY.

Of other acid-fast bacilli, the leprosy bacillus comes next in importance. Cases of leprosy are much more common in England than is generally supposed, and as the bacteriological technique is exactly the same as for tubercle, the practitioner should be quite competent to diagnose such cases if he happens to meet with them in his practice. The bacillus resembles the tubercle bacillus very closely, both as regards its size, general appearance, and staining reactions; it has never, however, been cultivated, though many attempts to do so have from time to time been made. It is generally stated that the bacilli take up the basic anilin stains more readily than do those of tubercle, but this is doubtful; and in order to ensure success, carbol-fuchsin should be used. Again, some say the bacilli decolorize more easily, and so advise weaker acids (5 per cent.) to be used; but the usual 25 per cent. in our hands has always given quite satisfactory results. The position of the bacilli in the different parts of the body is interesting. They can generally be found in the nasal mucus; they are present in the tubercles in enormous numbers; they are comparatively

scanty in the macular eruptions, and also in the nerves; they have also been found in the testicles, lymphatic glands, spleen, liver, and endothelium of the blood-vessels. Their enormous number in the skin lesions at once announces them as non-tubercular, and their marked tendency to become arranged in bundles is also useful in differentiating them. The best ways to obtain them for demonstration are the following: (1) With a platinum needle (looped) take some of the secretion from the nose, spread this out on a slide, and fix it in the usual manner over the spirit lamp. (2) Take an ivory pile clamp and squeeze one of the tubercles between its two limbs. Next open the tubercle with a small knife or needle and clear serum will exude. Take some of this, spread it on the slide, and fix it in the usual manner; then stain by the Ziehl-Nielsen method. Carbol-fuchsin is applied, the specimen is heated over the spirit-lamp till bubbles of steam rise, then the 25 per cent. sulphuric acid is poured on and off till the film becomes pale pink or almost white; next after washing well, counter-stain with methylene blue and mount in Canada balsam. The bacilli, just as in specimens prepared from tubercle, are red; the general tissue, pus cells, granulation tissue, and stroma, blue.

OTHER ACID-FAST BACILLI.

In addition to those of tubercle (under which we also include mammalian, avian, and fish tubercle) and leprosy, other acid-fast bacilli exist; and though these are of little importance of themselves from a pathological point of view, they may be mistaken for the bacilli of tubercle, and thus give rise to much confusion. The tests for distinguishing them are chiefly cultural, and cannot be gone into here, but the following brief description of them may prove useful:—

1. The *Smegma bacillus*, found in smegma: small bacillus, generally a little shorter than tubercle; difficult to stain; resists decoloration with strong mineral acids after being stained; grows with difficulty on culture media; may be confused with the tubercle bacillus in urinary cases, but may be distinguished by adding alcohol to the smear for a minute after the treatment with acid. This decolorises it, but does not affect the bacillus of tubercle. In suspected cases the urine should always be drawn off with a catheter.

2. *Møller's grass bacillus*: strongly acid-fast. It is distinguished by the fact that it will grow easily and quickly on ordinary cultural media. From the faces of the cow it might get into the milk, and so be mistaken for the bacillus of tubercle.

3. *Møller's mist bacillus* (*dung bacillus*): acid-fast, similar characters to the grass bacillus.

4. *Rabinawitch's bacillus of butter* (*butter bacillus*): shorter and thicker than the bacillus of tubercle, acid-fast. Grows fairly rapidly on culture media.

5. Some of the streptothrix group are also acid-fast.

POINTS IN DIAGNOSIS.

THE BLOOD IN HODGKIN'S DISEASE.

It frequently happens that specimens of blood are sent to the laboratory for investigation with some such query as the following: "My patient has some very enlarged glands in the neck, and in one axilla; I think the trouble is either tuberculous or else due to Hodgkin's disease; will you please examine the blood and tell me if it indicates Hodgkin's disease?"

POSITIVE AND NEGATIVE POINTS.

This query is chiefly made by the surgeon, who wishes to decide whether the glands should be excised or not. From the frequency with which it is made, it would seem that there is a widespread belief that the blood in Hodgkin's disease presents features of a *positive* nature. This, of course, is not the case; its features are all *negative*. A blood examination in Hodgkin's disease is quite necessary, in order to exclude lymphatic leuchæmia and spleno-medullary leuchæmia, in both of which the blood changes are positive (see article on "Leuchæmia," already published). It would also help to exclude simple inflammation of the glands with tendency to abscess formation, for in such a case there would be leucocytosis with relative increase in the polymorphonuclear cells (see article on "Differential Leucocyte Counts"). Beyond excluding these possibilities, however, it is important to remember that the blood examination in Hodgkin's disease assists but little in the diagnosis, and certainly does not serve to distinguish this disease from tuberculous glands.

WHAT THE BLOOD-COUNT SHOWS.

In the early stages of the disease the blood is that of an apparently normal person; the red corpuscles at this time may still number 5,000,000 per cubic millimetre, the hæmoglobin may be from 80 per cent. to 100 per cent. of normal; the leucocytes may number 6,000 per cubic millimetre; the differential leucocyte-count may show no departure from that of health; and in stained films the red blood discs may be of fairly uniform size and shape, staining well, and presenting no nucleated varieties.

As the patient becomes more ill, anæmia of the chlorotic type will supervene. The hæmoglobin will diminish before the red corpuscles do so, the colour-index (*i.e.*, the ratio of hæmoglobin to red corpuscles) falling below 1.0. Even when the illness is advanced, there is seldom leucocytosis, and the differential leucocyte-count shows no constant type. It is not uncommon to find a moderate increase in the small lymphocytes relatively to the other white

cells, the polymorphonuclear cells being proportionately diminished; on the other hand, there are cases in which the reverse occurs, the polymorphonuclear cells being relatively increased and the small lymphocytes diminished.

THE PRESENCE OF MYELOCYTES.

If there is any help to be expected from the differential leucocyte-count at all, it is that it will very likely show the presence of a small number of myelocytes, 1 or 2 per cent., for example, and an occasional basophile cell. The myelocytes and basophile cells by no means prove that the condition is Hodgkin's disease, but they indicate that there is something distinctly wrong with the blood, and therefore tend to support a diagnosis of Hodgkin's disease made upon other grounds.

TWO TYPICAL COUNTS.

The following specimens of differential leucocyte-counts, both from typical cases of Hodgkin's disease, show how inconstant the figures may be, and therefore how little they serve as a basis for differential diagnosis:—

Hodgkin's Disease with Relative Increase in the Small Lymphocytes.

(Total leucocytes 7,200 per cubic millimetre of blood.)

| | per cent. |
|--|------------------------|
| Small lymphocytes | 42 |
| Large hyaline lymphocytes | 6 |
| Polymorphonuclear cells | 50 |
| Coarsely granular eosinophile cells | 1.5 |
| Myelocytes | 0.5 |
| Basophile cells | an occasional one seen |

Hodgkin's Disease with Relative Increase in the Polymorphonuclear Cells.

(Total leucocytes 5,600 per cubic millimetre of blood.)

| | per cent. |
|--|-----------|
| Small lymphocytes | 14 |
| Large hyaline lymphocytes | 5.5 |
| Polymorphonuclear cells | 77 |
| Coarsely granular eosinophile cells | 1.7 |
| Myelocytes | 1.2 |
| Basophile cells | 0.6 |

POINTS IN FAVOUR OF HODGKIN'S DISEASE.

When there is an enlarged spleen as well as enlarged lymphatic glands, an absence of leucocytosis is a strong argument in favour of Hodgkin's disease, whatever the rest of the blood-count may show; the difficulty in diagnosis chiefly arises when there are enlarged glands, but no enlarged spleen. It is the purpose of the present article to emphasise the fact that the blood examination in such a case will not permit one to say definitely "This is a case of Hodgkin's disease"; the most that can be expected from the blood-count is the exclusion of a few of the other possibilities; so that, when the blood shows no particular characteristics, one may say "The condition of this blood is *compatible with a diagnosis of Hodgkin's disease.*"

POINTS IN TREATMENT.

THE FULL ACTIVE PRINCIPLE IN DRUGS.

The Difficulty of being Certain that Drugs Prescribed or Used in Dispensing Contain the Full Amount of Active Principle.

WE have already discussed the difficulty there is in knowing whether such drugs as digitalis, strophanthus, squill, and ergot contain the full amount of active principle; in the case of these drugs the trouble arises, not from adulteration, but from the fact that the active principles are not alkaloids but glucosides, are unsuited for chemical analysis, and can only be standardised by physiological experiment. There are large numbers of other drugs, however, which, for the sake of cheapness, are liable to adulteration. There is so great a tendency nowadays to buy things in the cheapest market that the quality of the drugs used in making up prescriptions runs a very great danger of deteriorating. The medical man has no time to test his drugs for himself; if he buys in the cheapest market, as most of us are naturally inclined to do, he lays himself open to be deceived in the quality of his drugs; and the curative effects of his treatment will be less good than those of his neighbour who takes more care to know that his drugs are pure.

It is well, therefore, to purchase medicines only from such firms as are known to take the greatest care in avoiding adulterated samples of the commercial drugs, even though the cost is necessarily a little more.

It is wonderful what trouble is taken by some firms in analysing the crude drugs. The amount of work entailed in determining specific gravities; saponification values; acidities; percentages of ash, resin, extractives; melting-points; solubilities in various strengths of alcohol; iodine absorptions; ester values; polarimetric angles of rotation; alkaloid percentages; and so on, is very great. It costs money, and the medical man cannot but be grateful to the chemists who do these things for him.

The following examples will suffice to show the importance of this. They are taken from the annual report of a large analytical laboratory.

Sandal-wood oil is an example of an expensive medicine which it well pays the producer to adulterate. It can be bought at all sorts of prices, but it becomes almost a certainty that the very cheap samples will fail to cure where dearer samples of known purity would greatly accelerate the recovery of the patient; for it is a medicine of undoubted efficacy when that which is given is really sandal-wood oil and not a fluid which merely bears that name. The report of the analyst says: "Considerable care is necessary before accepting parcels of this oil as genuine." Parry has shown that fractional distillates of the West Indian oil (from *Amyris balsamifera*) are used for sophistication, and altogether the "blending" of this product appears to have reached the stage of a science. This warning is the more necessary where the oil is sold in capsules, and hence less readily accessible for testing.

A considerable number of the samples examined gave results varying within the following limits:—

| | | | |
|------------------|-----|------------|-----------------|
| Specific gravity | ... | 0.975 to | 0.990 |
| Rotation | ... | -15.75° to | -19.5° |
| Santalol | ... | 91.61 to | 98.79 per cent. |

All soluble in 6 volumes of 70 per cent. alcohol.

As an example of the oils, necessarily styled "suspicious," is the following:—

| | | |
|------------------|-----|-----------------|
| Specific gravity | ... | 0.972 |
| Rotation | ... | -16.10° |
| Santalol | ... | 89.14 per cent. |

Not entirely soluble in 6 volumes of 70 per cent. alcohol.

Copaiba: "We have again to record our experience that a large proportion of the parcels of copaiba on the market give reactions more or less distinct when the colour tests are applied. Of the eleven samples submitted to examination, the results of which are recorded below, but one could be described as giving no reaction with these tests, while in no case could gurjun balsam be detected according to the indications of the resin acid factor."

| | | | |
|-------------------|-----|-----------|-------------------|
| Specific gravity | ... | 0.9679 to | 1.0108 |
| Resin | ... | 36.4 | to 64.9 per cent. |
| Acid figure | ... | 47.44 | to 91.81 |
| Ester figure | ... | 3.0 | to 8.7 |
| Resin acid factor | ... | 0.61 | to 0.79 |

Another sample of balsam was expressed from capsules offered at an exceptionally low price, and gave results which would appear to indicate gross adulteration. They are as follows:—

| | |
|-------------------------------------|-----------------|
| Specific gravity | 0.9507 |
| Resin (soft in character) ... | 42.22 per cent. |
| Acid figure | 35.8 |
| Ester figure | 17.0 |
| Resin acid factor | 1.185 |
| Official colour tests, deep purple. | |

Jalap: "Seventeen samples of jalap have been assayed for resin, no one of which satisfied the official standard, the average figure obtained being the worst we have yet met with. Total resin 3.8 to 8.4, averaging 6.3, per cent."

These three examples have been picked out because they concern common drugs which are of known efficacy when they are pure. It must not be supposed that there is an all-round adulteration of every drug upon the market; the report of the same analytical laboratory contains scores of analyses of drugs which have proved to be quite pure. The point is that, without the check of repeated analysis of samples, an article may be called by such-and-such a name, and sold accordingly, when its quality, and consequently its curative action, is very much below par. However much one may be tempted to buy the cheapest samples possible, one should refrain from doing so unless, in addition to being cheap, the medicine has some guarantor that it is pure.

POINTS IN SURGERY.

CONGENITAL HYPERTROPHIC STENOSIS OF THE PYLORUS.

ONLY during the last 10 years or so has this condition been commonly recognised, as previously the cases were not differentiated from those of ordinary infantile marasmus with vomiting. The characteristic symptom is forcible vomiting after food, commencing within the first month or two after birth, steadily increasing in severity, giving rise to extreme wasting, and finally, unless successfully treated, leading to death from inanition. In addition, gastric peristalsis is often readily seen and a hard tumour can usually be felt in the position of the pylorus. Signs of gastric catarrh commonly develop in the later stages and constipation becomes increasingly marked. Considerable uncertainty exists as to the real nature and cause of the disease, whether it is a true hypertrophy of the circular muscular fibres at the pyloric orifice, or whether this is merely a secondary condition due to increased irritability and activity (spasm) of the muscle, excited possibly by some alteration in the character of the gastric secretion.

It was, however, on the question of treatment that the chief interest of the discussion at the recent meeting of the Clinical Society centred, for on this all-important point marked divergencies of opinion presented themselves. Several of the speakers, both physicians and surgeons, maintained strongly that, in practically all the really serious cases, by far the best, if not the only chance, of complete recovery was afforded by a timely surgical operation, some form of pyloroplasty being preferable to gastro-enterostomy. Certainly the figures brought forward by Dr. Cautley and Mr. Burghard strongly support this contention and contrast markedly with the very unfavourable results, obtained by some of the speakers, with purely medical treatment, especially with the statement of Dr. Ashby, of Manchester, that the eleven cases he had treated had all died. On the other hand, Dr. Still, and even more notably Dr. Hutchison, have had very good results without surgical intervention in cases which were apparently quite as severe as those subjected to operation. The essential feature of the medical treatment is regular washing-out of the stomach, at least once or

twice a day at first, and later on every other day as the child begins to improve. At the same time, the diet must be carefully regulated, various combinations of albumen water, whey, peptonised milk, and humanised milk being given. Dieting alone, however, no matter how well carried out, is quite inadequate to effect much, if any, improvement, seeing that when the vomiting first begins the child is often being fed exclusively on the breast. But even if medical treatment is successful, it calls for much time and attention, as it must usually be continued for a long period. It is probably too soon to attempt to decide finally on the respective merits of these two different methods of treatment; but so far as our present knowledge goes the position may perhaps be summed up as follows: The first essential is early diagnosis of the disease, and this may be by no means easy, seeing that it has probably not yet obtained full recognition throughout the profession. It is so natural to attribute the vomiting to the ordinary gastric disturbance of infancy, especially as after a time some gastric catarrh is very prone to develop. The result is that one food after another is tried, the vomiting all the time getting worse and worse, until the infant is completely worn out, and either dies from some intercurrent disease or, perhaps, expires suddenly from sheer inanition. Whenever a young baby begins to vomit shortly after taking food and without obvious cause, and no improvement occurs when any apparent error in the diet has been corrected, the existence of this disease of the pylorus should be suspected, visible peristalsis should be carefully looked for, and the abdomen should be palpated day by day for a pyloric tumour. Once the diagnosis is clear, careful and systematic lavage should be resorted to, and the child's weight noted week by week. Rapid recovery is not to be expected, and more or less irregularity in the course of improvement is common. A gain of a very few ounces each week must be regarded as satisfactory. Should, however, the child continue steadily to lose ground, or should systematic lavage be for any reason impracticable, recourse should be had to surgery before the patient has become excessively emaciated, and, if possible, before gastric catarrh is firmly established.

THE REQUIREMENTS OF LOCAL ANÆSTHESIA.

By J. AIKMAN, M.D. Glasg., Birnam, Guernsey.

It is interesting and instructive to follow the movement which began with the introduction of general anæsthesia about the middle of the last century, which extended the domain of antiseptic surgery into new regions, and is now trending back to a localised anæsthesia produced by certain vegetable and animal alkaloids. General anæsthesia favoured the work of the handicraftsman; antiseptics opened up to him regions of the body hitherto sealed against

his prowess; local anæsthesia in its perfection should free him from the dangers and responsibilities which are inseparable from the production of complete unconsciousness. Very early in the development of the antiseptic system, Lord Lister called attention to the anæsthetic effect of pure carbolic acid when applied to the wound in cases of compound fracture; he thought that the acid then tended to allay the restlessness of the patient after the first dress-

ing. The experience of surgeons has urged that the same effect on the operator's hands, even from weak dilutions, is an argument in favour of aseptic rather than antiseptic surgery. Local anæsthesia by freezing next occupied attention, and it was noted that the numbing was more easily obtained when the part was deprived of its blood supply by a tourniquet. Later cocaine claimed favour as a local anæsthetic, but its effect on the heart was prejudicial in some cases. Here, again, the tourniquet limited the danger and accentuated the effect, but did not free the patient from certain results. Then it was recognised that the active substance of the suprarenal gland contracted the local blood-vessels, and when added to cocaine, prevented in great measure its absorption. The exact measure of the adrenalin required was a difficulty; if it was in excess it impaired the power of the tissues to repair the surgical injury; moreover, it was sometimes followed by congestion of the part and signs which might be interpreted as failing power in the phagocytes or a deficiency of the opsonins. Towards the solution of

that difficulty many suggestions have been made, the most reasonable taking the form of graduated solutions enclosed in sterilised glass capsules. The requirements of the solution are obvious; it must contain enough of the local anæsthetic and not too much rena-glandin. There is a further word as to whether cocaine or eucaine is the better agent. Cocaine has the more rapid action, but the effect lasts over a short period, which may serve the needs of the surgeon, but does not maintain the restfulness of the part until this has become accustomed to its dressings—as the numbing of carbolic acid did in cases of compound fracture. In this respect eucaine acts better. One test of a good capsule is that it not only produces complete loss of sensation, but also controls weeping from scraped surfaces where such are left after the destruction of suppurating glands. That this is due to an effect of the adrenalin is evidenced by the result of dressing, the leaking surfaces tending to ulcerate on the skin enfeebled by varicose veins. The rena-glandin impregnated absorbent cotton wool forms a most useful dressing in such cases.

SOME PARALYTIC DEFORMITIES IN CHILDREN.

TRANSPLANTATION OF TENDONS.

FIXATION OF JOINTS BY EXCISION.

THE management of deformities due to anterior poliomyelitis has undergone interesting changes during recent years. The transplantation of tendons has proved so successful as to revolutionise this branch of pediatrics. Why should a partially paralysed limb be condemned to carry cumbersome instruments if the functions of the joints can be restored by other means? This can be brought about by a carefully-planned transplantation of tendons of the remaining set of healthy muscles into the tendons of the paralysed group. If this is done, instrumentation, which further impedes the circulation in an already cold, blue, and weak limb, may in a great many cases be dispensed with. Not only is this desirable on account of the weight of the instrument, but on account also of its liability to get out of order, constantly requiring readjustment and renovation, and thereby being the cause of considerable expense. The most promising cases for tendon anastomosis are those in which the paralysis is limited to one muscle group; either the extensors of the toes, or the peronei, or the flexors, or the muscles acting on the tendo Achillis. After the paralysis has existed over a year or two, deformities arise from the unopposed action of the healthy muscles; and the healthy tendons thus becoming abnormally short, require division before the joint can be replaced in its normal position. If tenotomy alone is performed, and the limb put up in plaster or other fixative, the deformity will eventually recur unless the correction is maintained by mechanical control.

Instead, therefore, of merely performing tenotomy, a tendon of the unparalysed group is selected and implanted so that its muscle can act upon the tendon of the paralysed muscle; not only is the deformity overcome, but its recurrence is prevented without resort to instrumentation.

To take an instance. A boy of five years was

brought by his mother on account of flexion of the great toe, which caught in the ground in walking when bare-footed. On examination this was found to be due to inability actively to extend the toe in the very slightest degree. All the other toes could be extended, and no other muscle group was completely paralysed. The tendon of the extensor longus hallucis was implanted into the innermost tendon of the unparalysed extensor longus digitorum. The result was complete control of the great toe, so that it no longer caught on the ground in walking.

There is a wide range in the extent of the paralysis between that of a single muscle, as in the case just cited, and complete paralysis of the limb. Even in many of the worst cases, however, something may be done to mitigate the condition.

In severe cases the flail-like limb at first sight appears to be completely paralysed. Careful examination by inspection, even without the aid of electrical reactions of the nerves and muscles, may reveal one set of muscles, perhaps the glutei or the adductors to be unaffected, and the hamstrings only partially affected, while the extensors of the knee and other muscles of the leg are completely paralysed. In such a case the biceps tendon of the hamstring group and the adductor magnus tendon may be isolated, divided low down, and brought to the front of the knee, where they are sutured to the extensor tendon of the joint.

When the muscles are completely paralysed the joints may be fixed by excision of the articular cartilage so as to bring about osseous union. This has been done in the knee and sub-astragaloid joints, leaving movement to take place in the ankle joint, upon which a dorsiflexion spring may be made to act.

These cases require very careful investigation before anything can be done, and the after-treatment must be particularly painstaking.

THE GENERAL PRACTITIONERS' COLUMN.

LATERAL CURVATURE OF THE SPINE IN CHILDREN.

By L. A. PARRY, M.B., B.S.Lond., F.R.C.S.

LATERAL curvature of the spine in children is a common affection. No doubt a large number of these cases get quite well, but in a certain number the disease steadily goes from bad to worse, and ultimately leaves the child a permanent cripple. Hence I think it cannot be out of place to call attention to the urgent importance of early, prolonged, and systematic treatment.

HOW TO EXAMINE THE CASE.

The examination of these cases is important. The child is stripped, and the position of the spines of the vertebrae is marked by a carbon pencil. Any deviation, unless it be exceedingly slight, is thus readily detected. In cases where the amount of curvature is quite small, it is made more manifest by getting the child to lean well forwards, with its arms crossed on the chest. Any difference in level of the anterior superior spines of the ilia is next looked for, as one of the first points in treatment is to correct any obliquity of the pelvis. The child is next suspended by lifting it up under the armpits, to see if any alteration is made in the curve. This procedure is important for prognosis. If the curve is obliterated, one may reckon that proper treatment will succeed in completely restoring the spine to its normal shape, but if the curve is only diminished, or is not altered, the spine can never be restored to its correct shape; the case can at the best be cured with such an amount of permanent deformity as is due to bony change.

POINTS IN TREATMENT.

The first point in treatment is, as in every other disease, to remove any possible cause. If the two limbs are of unequal length, giving rise to obliquity of the pelvis, this must be remedied by some suitable means, such as a proper boot, some surgical operation, etc. Any attitude which is a bad one, and is constantly assumed by the child, must be most carefully corrected. Stooping forwards to read as a result of myopia is an example of this. It is always well to see if the child has enlarged pharyngeal or faucial tonsils, and remove them if necessary.

Drugs are of importance. Anæmia, dyspepsia, and constipation all require treatment, and must immediately be seen to. General hygienic treatment is necessary. Plenty of fresh air, change of climate, and careful diet are to be ordered.

As regards ordinary exercise, great care is necessary. It is important, on the one hand, not to let the child overtire itself; and, on the other hand, a certain amount of healthy outdoor exercise is essential. All children should lie down flat, either in the prone or supine position, for at least two hours a day. One hour should for preference be immediately after the special exercises to be referred to below; the second hour at some other time. Massage for half an hour daily to the muscles of the back is an important procedure.

IS A SUPPORT NECESSARY?

As regards spinal supports, very little need be said. Modern treatment most emphatically condemns them in all but the most exceptional cases, and these are the cases in which the curvature steadily increases in spite of careful treatment, or in which the pain or weakness of spinal muscles is very marked. I have only had one example in which any support has been necessary. In the rare cases in which a support is needed, spinal braces are probably the best. Even then the apparatus should not be worn continuously, but only at intervals during the day, and it should be of such a nature that it does not prevent movement of the spine and its muscles.

The special exercises which are to be made use of in the treatment of scoliosis are very important. They must be regularly and systematically carried out. At first the child should be taught the exercises by the surgeon himself, in the presence of the mother or governess who is going to see to them at home. They commence with easy ones, lasting only a few minutes; the time is gradually increased as the back becomes stronger, and the exercises more difficult, to half an hour twice a day. They should be carried out slowly, so as not to tire the child, with frequent intervals of rest, at first in the supine position, later standing up, and later still using light dumb-bells—at first not exceeding 1 lb. in weight. I do not propose to describe the exercises in detail; space does not permit that. I employ those recommended by Lewis, but I attach a great deal more importance to the regular, persistent, and systematic carrying out of a scheme of exercises than to any particular variety or plan. Briefly such exercises consist of a series of movements which exercise the muscles acting on every part of the body, the limbs, the head, and the trunk by flexion, extension, abduction, adduction, and circumduction. In early cases a month or six weeks will cause the curvature to disappear.

EXERCISES.

If the curvature is very marked, special exercises must be designed. For example, in a dextro-dorsal curvature the following is an excellent one. The right hand should be placed on the ribs, as high up and as far back as possible, thumb forwards. The left forearm is placed on the head, so that the left fingers touch the right ear. Bend all the body above the right hand as far as possible to the right, and whilst in that position take a few deep inspirations, then return to the symmetrical position. This is merely an example; other exercises can be designed for other curves. I conclude by once more repeating that by immediate and proper treatment one can generally save early examples of scoliosis from passing into confirmed cripples, and that the treatment can be carried out by any ordinary practitioner if he have sufficient care and patience.

DERMATOLOGY.

THE SKIN IN SPRING-TIME.

Just about this time of year the practitioner will be pretty sure to come across a certain number of cutaneous disorders which owe their origin more or less directly to the climatic and other conditions. Few of them, happily, are of really serious import, but, especially in children, their recognition and treatment may prove of some difficulty. Such eruptions may be grouped as follows: (a) catarrhal, (b) toxic, (c) vaso-motor.

The skin is no less susceptible to changes of external temperature than the throat or lungs, so that it is not at all surprising that it should be attacked with some inflammatory disorder as the result of injudiciously discarding some, or all, winter clothing before "May is out."

ECZEMA AS A CUTANEOUS REACTION.

There is a growing tendency to regard eczema, which is really a catarrhal dermatitis, as a reaction on the part of the skin to some irritating agent, whether this act from within or from without the body. The use of some wholly unsuitable soap, or the direct action of a cold current of air upon the face, may determine a "reaction" which is clinically recognised as an attack of eczema. The face most commonly suffers in this way, and if the inflammatory process be severe the case may easily pass for one of erysipelas, but there is not the characteristic advancing border nor the constitutional disturbance met with in the latter affection. In these cases there is an almost complete absence of papule-formation, the chief manifestation being an acute erythema. The primary indication in treatment is to soothe and protect the inflamed skin, and lotions of calamine, made without glycerine, or simple Goulard water, may be applied in the earliest stages. When exudation has commenced, a creamy emulsion of the oleates of zinc and bismuth, 20 grains of each, with 30 grains of the carbonate of magnesium, in an ounce of sweet almond oil, will be more acceptable. The oleo-palmitate of zinc, an impalpable powder, is another most useful application. All washing with soap must be prohibited, but gentle bathing of the affected parts with tepid milk and water, with a little fine oatmeal, may be allowed. The kidneys and bowels should be encouraged to act well at the same time.

Some people get severe irritation of the skin every spring, accompanied by an outbreak of small papules, sometimes hardly visible, upon the face, neck, and arms. This is another form of catarrhal dermatitis, or eczema, closely connected with the next, or toxic, group of cutaneous disorders. The condition is worse in the evening and also after meals. Constipation is generally present, and symptoms of dyspepsia may also assert themselves. A careful overhauling of the diet and attention to the bowels are essential, strong tea and any excess of

sweet foods being absolutely forbidden. An ointment of ichthyol, 10 grains, with the same quantity of zinc oxide, in one ounce of vasogen or lanoline, may be advantageously applied at night.

THE URTICARIA OF INFANTS.

Common papular urticaria in young children is a most troublesome thing. The older dermatologists knew it under the name of "Lichen urticatus" (Willan and Bateman), and, indeed, many of the lesions are distinctly lichenoid in aspect. True lichen planus is exceedingly rare in infancy, so that special attention should be paid to the mode of onset of the papules. The mother will usually state that the spots "begin like heat-bumps"; they are very irritable and quickly become surmounted with a minute blood-crust, the result of rubbing and scratching. When the papules retrogress they assume a flattened and even shiny character, but other lesions as wheals and definite papules will be sure to be seen. The improper feeding of infants, especially with patent foods containing an excess of starch, or with bread-jelly and sponge cakes, at an age when their digestive ferments cannot possibly cope with amylaceous matter, is largely responsible for the appearance of the eruption, but it is also a fact that cases are brought up to our skin clinics in greatest abundance in the spring and early summer. Enlargement of the inguinal and cervical glands does not occur in this affection, but this symptom is commonly present in the milder varieties of prurigo, with which papular urticaria may be easily confounded. Weak tar lotions—*e.g.*, cyllin, 1 in 2,000, or the liquor carbonis detergens, half a drachm to a pint of warm water, are useful to allay irritation, after which an ointment containing a little ichthyol (5 grains) or beta-naphthol (8 grains) to one ounce of vaseline may be applied. The effect of a nightly powder of half a grain of hyd. cum creta with a little sodium bicarbonate is often magical.

Many cases of acne are combined with true urticaria, linking, as it were, the toxic with the vaso-motor disorders. There can be no hard and fast rule for the treatment of these borderland cases, as the underlying cause in each must be diligently sought for. If saline purgatives and stomachic remedies do not improve matters, recourse may be had to the vaso-motor tonics, such as minute doses of ergot, or to calcium lactate, where there is deficient power of blood-coagulation.

A fourth class of cutaneous affections may be described as those which tend to recur, with more or less constancy, every spring, such as psoriasis, and a few special eruptions of a bullous type. With regard to the former complaint it has been found by Abraham that nearly 50 per cent. of the cases presented themselves at skin clinics for the first time during the months of April to June inclusive. The so-called *Prurigo hiemalis* has been shown by Pye-Smith to be specially frequent during the cold east winds of spring.

GYNÆCOLOGY.

THE TREATMENT OF UTERINE FIBROIDS.

By H. T. HICKS, F.R.C.S., Assistant Surgeon to the Samaritan Hospital for Women; Obstetric Registrar to Guy's Hospital.

ON SOME POINTS IN THE TREATMENT OF UTERINE FIBROIDS.

So many points must be taken into consideration in advising a patient suffering from uterine fibroids, that it is not always an easy matter to form a definite opinion. Therefore, it will perhaps not be amiss to criticise some of the points in the life-history and symptoms of these innocent but by no means harmless tumours.

INFLUENCE OF AGE.

It is, of course, a well-known fact that fibroids become progressively more common after the age of 27 years, and that they grow steadily up to about the time of the menopause, when they share in the local atrophy, and shrink. Patients suffering from fibroids are told the above story and advised to await the menopause. If the menorrhagia is not profuse, drugs and other palliative measures are adopted in order to tide the patient over the menopause. In the greater number of cases this form of treatment should be adopted, but the prognosis is not always so simple. If a patient has reached 44 years and has one or more small interstitial fibroids, giving rise to moderate menorrhagia, she will no doubt reach the menopause with the aid of ergot and curetting. If, however, the menorrhagia is becoming more profuse, or the tumour is of large size, it surely is absurd to put off radical measures when chronic hæmorrhage and degeneration in the tumour will most likely play havoc with the patient in the meantime. One must be guided by the symptoms, the size and condition of the tumour and its anatomical position before deciding as to what advice to give. The age of the patient must certainly be taken into consideration, but it is a mistake to lead a patient to suppose that all danger will be passed when she reaches the menopause. Moreover, large fibroids most distinctly place the menopause later on in life, and menstruation may still be regular at the age of 52 or more.

INFLUENCE OF MENORRHAGIA AND BLEEDING ON THE TREATMENT.

Menorrhagia is perhaps the most common symptom which forces a woman to seek advice. Let us for a moment note what is happening in a uterus with a fibroid tumour. Fibroids start to grow in the uterine muscle, and as they steadily increase in size they tend to grow either towards the peritoneum (subperitoneal fibroid) or towards the uterine cavity (submucous). It is obvious that the closer the tumour is to the mucous membrane, the more pronounced will be the hæmorrhage, and *vice versa*. With subperitoneal fibroids the hæmorrhage will become less and less until there may be no increase in the menstrual flow.

If an interstitial fibroid enlarges the cavity of the

uterus, as it most commonly does, there will be an increase in the menstruating area. There will also be great increase in the vascularity, and thus menstruation becomes profuse. In time the tumour will project beneath the mucous membrane, or even become polypoid, when the mucous membrane is still more altered and continuous hæmorrhage may be the result. It is for hæmorrhage that we adopt palliative means of treatment. For pressure, pain, or other symptoms more radical methods must be used. We will, therefore, now discuss the various palliative methods by which the hæmorrhage may be controlled.

Of drugs which may do good ergot stands first on the list; it should be combined with iron (10-20 minims of the liquid extract with iron). It should be given just before and during the period, and will often control bleeding of moderate degree. The patient should rest during the period. I have seen quinine, hydrastis, and styptol do good, but no drug has so great an influence as ergot.

OPERATIVE PALLIATIVE TREATMENT.

There are two chief forms of operative palliative treatment, *e.g.*, curetting and oöphorectomy. Curetting gives relief by removal of the oedematous and congested endometrium, but the relief is only temporary. If the hæmorrhage is very profuse, curetting should not be advised, because the fibroid is probably close beneath the mucous membrane, and it may be infected and become septic. Again, it is impossible satisfactorily to curette the mucous membrane of a greatly dilated uterine cavity. For large fibroids curetting is futile and should be avoided.

Curettagé then will bring temporary relief for a few periods only, and should be used as a means of tiding the patient over the menopause; it should only be advised when the fibroid is interstitial, not of large size, and the uterine cavity only moderately distended. Oöphorectomy is another measure which has been tried as a palliative operative means of treating the menorrhagia of fibroids. When once the abdomen has been opened, it is, however, the tumour itself that should be removed; the ovaries, which have important physiological functions other than ovulation, should be conserved at all costs. There are other forms of palliative treatment which do not call for special comment. Oöphorectomy may bring on a most distressing menopause, and in many cases does not cause a cessation of growth in the tumour, and irregular uterine hæmorrhage continues.

Just a word about chronic uterine hæmorrhage. The more one sees of it the more convinced one becomes of its far-reaching effect on the mental and general condition of the patient. Chronic menorrhagia or metrorrhagia will wreck a woman's life,

and a patient should be warned of the danger she has to face in the end. Fibroids are not the only innocent local cause of chronic hæmorrhage, for myometritis and arterial degeneration frequently cause it. Fibroids, however, are a very common cause. How often a patient who is the subject of chronic uterine hæmorrhage puts off going to her doctor, and how often does the doctor persist in palliative treatment in the hope that the menopause may bring the desired relief. A woman can stand a fairly prolonged period of bleeding, but a year to 18 months of moderate hæmorrhage is enough, and if the hæmorrhage is profuse, it may be too much. What is the result? A thin, nervous, lemon-yellow coloured woman comes for advice, having suffered, it may be, for years from menorrhagia. At home she is utterly incapable of doing any work, and her mental state may be bordering on delusional insanity. If a radical operation is carried out at once the shock may be sufficient to determine the threatened mental storm. The patient should be put to bed, fed up on good food and iron until she is in a condition to stand the radical operation. The mental side of these cases is, to my mind, often neglected.

PRESSURE SYMPTOMS AND PAIN.

These symptoms are most often associated with large tumours, but even small tumours may retrovert the uterus and become impacted in the pelvis. A sudden jerk may thrust a small fibroid backwards, as when a horsewoman puts her horse over a fence; the tumour may then become impacted in the pelvic cavity, causing great pain and pressure symptoms. Small tumours may be pushed out of the pelvis manually, and the symptoms thus relieved, but as a general rule a fibroid should be removed by operation if there are marked pressure symptoms and pain.

The Size of the Tumour.—A tumour that is larger than a three months' pregnancy should always be treated by radical means. It will sooner or later cause pressure symptoms, and is very prone to degenerate. Degeneration is more common about the menopause, and it must not be forgotten that a sarcoma associated with a fibroid occurs more frequently than can be explained by mere accident.

Fibroids grow slowly, and if the tumour begins to increase rapidly some form of necrosis is taking place within it, or sarcomatous changes are occurring. These changes are more common in the large fibroids than in the small tumours, and are particularly prone to occur when rapid vascular alterations are affecting the tumour such as are associated with the menopause and the puerperium, so that the very vascular changes at the menopause, which we look forward to as the cause of atrophy, may bring about one of the various forms of necrosis in the tumour.

ANATOMICAL POSITION.

Subperitoneal Fibroids do not give rise to much trouble unless they are of large size. As a rule a fibroid becomes fibrous and hard when it is expelled outwards beneath the peritoneum. As long as the

tumour remains sessile and is not of large size, it can be left alone. If, however, it becomes pedunculated, it should be removed, because such a tumour, wandering about the peritoneal cavity, may cause peritonitis and perhaps intestinal obstruction.

SUBMUCOUS FIBROIDS.

Submucous Fibroids.—Here the menorrhagia becomes much more profuse, and eventually almost continual metrorrhagia is established. If the fibroid is of large size, one part of the tumour may be implanted in the uterine wall while the other projects into the cavity, causing great dilatation of the uterine cavity. The uterus makes efforts to expel the tumour, and thus causes pain. The patient becomes very ill from the loss of blood. The os becomes patulous and dilates, and the examining finger may pass through the cervix, or the lower pole of the tumour may bulge into the vagina. Sloughing and septic necrosis are common, and may involve part or the whole of the tumour. Under these circumstances the result may be fatal through septicæmia or peritonitis or thrombosis.

Smaller tumours may cause great hæmorrhage and may dilate the uterine cavity, and later become polypoid. Radical methods should be adopted, but here one must deal with the growth from the vagina. If hæmorrhage is profuse and the cervix patulous the operator must explore the uterus from the vagina, for if this is not done he may be tempted to perform hysterectomy when, in fact, the fibroid could easily have been shelled out of its bed per vaginam. For larger sessile tumours hysterectomy may be necessary. Polypoid tumours should always be removed per vaginam.

When a large submucous fibroid is sloughing, the necrotic portion of the tumour should first of all be removed per vaginam, followed by copious antiseptic douching. These patients are often very ill from septic absorption. If the soft necrotic portion of the tumour is cut away bit by bit until the hard normal fibroid tissue is reached, the patient's temperature will generally drop, and after some weeks the rest of the tumour and the uterus can be removed by the abdominal route.

Although one cannot help thinking that palliative treatment is often advised without due consideration of the many important points which demand attention, it must be ever a matter of regret that these very points are often neglected in advising operation. It is far better to lean toward the adoption of palliative measures than to radical operative treatment.

THE Glasgow Maternity Hospital appeals for subscriptions to meet the cost of the additional buildings in course of erection in Ure Place. The hospital was originally started in 1834, and has occupied different sites during its history. The buildings at present drawing towards completion will meet the pressure on the present inadequate accommodation for patients; and at the same time provide a school equipped in all its departments for the teaching of practical obstetrics and gynecology. Towards the price of the ground and the cost of the new buildings a sum of about £40,000 has been subscribed, and for the balance still required of £35,000 the directors make an earnest appeal.

THE TREATMENT OF INSANITY.

Existing Defects and their Remedy.

III. THE LIFE IN ASYLUMS, HOSPITALS, AND LICENSED HOUSES.

THE public asylum offers a refuge for the insane poor; the registered hospital and the licensed house are for the well-to-do. It is true that there are some large provincial licensed houses in which pauper patients are received, but generally the statement holds good. Whichever of the institutions is visited by a medical observer, he will find certain characters that are common to them all. He will find them pleasantly situated, with ornamental grounds, laid out in shrubberies and adorned in summer with abundance of flowers; he will see cricket grounds, bowling greens, lawn-tennis courts, skittle alleys, aviaries, and everything that makes grounds attractive. He will see a building that ranges, according to its age, from solid comfort to more or less gaudy magnificence, and, on entering, he may or may not be greeted by a peculiar and most unpleasant odour, the "asylum smell." Going into the wards, he will find, even in the pauper asylums, comfort, brightness, and a standard of furniture, fittings, decoration, light, space, and warmth that is far in excess of the standard that prevails in the homes of the great majority of the inmates; and in some of the registered hospitals and licensed houses he will find that comfort is merged into luxury, often of a very expensive character.

In either case he will find that a great deal of ingenuity has been expended on means and appliances for keeping the patients in safe custody, and for concealing, as far as possible, the means of doing so. He will find high walls deprived of their forbidding and prison-like character by being sunk for half their height in the ground. He will find the windows rendered impermeable to the human body, not by massive iron bars, but by a light framework of iron or steel into which the glass is fixed. He will find that a vast amount of care and ingenuity has been devoted to so modifying the structure and fittings of the building as to deprive the patients of opportunities for injuring themselves. Projections from which a noose could be suspended are carefully abolished. All doors are made to open outwards. The gas cannot be turned on without a special key. The bath taps are so arranged that the cold water must be turned on first. The fires are carefully guarded, and the guards are locked. The windows are made to open only just so much that, while plenty of air can get in, no one can get out. The same care is evident in everything. Knives are kept locked in a box, which again is locked in a cupboard, and are counted before and after each time of using. Brooms and brushes are locked up when not in use. Everything is under lock and key.

Now if he seeks to know how the lives of the inmates are ordered, he finds evidence of the same careful, systematic, and sedulous study. Recreation is cared for fully as much as occupation. Every asylum of any size has its band, its ball room, its theatre, and concert hall. Every ward has its bagatelle board, its cards, dominoes, draughts, chess and other games. There is a lending library. If the

asylum is large enough to have its own chapel, as most asylums are, there is a choir which meets regularly for practice. Out of doors there are cricket, lawn tennis, bowling, fives, skittles, racquets, and what not. Every week there is a dance; concerts, theatrical performances, conjuring and variety entertainments are frequent. The lives of few people contain so many opportunities and invitations to recreation as do those of the inmates of institutions for the insane.

In other ways, too, the comfort and convenience of the inmates of asylums are studied. Private patients wear, of course, their own clothes, and, when the patient has not enough sense to care for himself, care is taken for him that he is clad sufficiently and properly for the time of the year. In the pauper asylums not only is the clothing good and sufficient, but appearance is studied, uniformity is avoided as far as possible, and opportunity and encouragement are given to the female patients to make such little additions in the way of ornament and embellishment as their means and taste may suggest. The food is abundant, of good quality, and varied; and extra delicacies for the sick are provided without stint.

To make the care of the insane thoroughly efficient, and to provide against the many contingencies in asylum life that are unknown in life outside asylums, it is very necessary that there should be in every institution a sufficient staff of attendants and nurses, thoroughly trained in, and adapted for, their peculiar duties. For such a staff careful provision is made. Their numbers are ample; their pay is good; pensions are provided for them when they are past work; they are taught and trained in an elaborate system of lectures and examinations by the medical staff of the asylum; and at the end of their curriculum they are examined by an independent authority, and diplomas are issued to those who pass the test.

That nothing may be wanting to render the lives of the insane as luxurious and as like to the lives of sane persons as possible, many of the registered hospitals and licensed houses have branch establishments at the seaside or in some health resort, to which those of the patients who are fit to go, can be sent when it seems that a change would benefit them.

In short, everything that can be done or devised to cheer the lives of the inmates of institutions for the insane, and to mitigate the irksomeness of their confinement is done liberally and lavishly; and if we regard institutions for the insane as places in which the inmates are to be made comfortable, to be luxuriously housed and fed and occupied and amused, we are compelled to testify that they serve their purpose with admirable completeness. But if we regard insane persons as sick persons afflicted with a grievous malady, and if we regard institutions for the insane as hospitals to which sick persons are sent to be treated for this grievous malady, and restored, if possible, to health, we must render a very different account of them.

THE EVOLUTION OF MEDICINE.

ANCIENT EASTERN METHODS.

I.—THE BARBER-SURGEON OF THE EAST.

THE "Bagh O Bahm" is an Urdu classic, containing a number of stories something after the fashion of the "Arabian Nights." The book was first published in its present form about the year 1800, but the tales are of much earlier origin. The scene of the majority of them is laid in the Persian Gulf and in Turkey, that of a fair proportion in India. Some of the stories deal with the treatment of wounds and diseases, and thus incidentally throw light upon the manners and methods of the practitioners of medicine and surgery, whose practice appears to have been based upon a curious combination of science and superstition.

THE HAJAM AND HIS METHODS.

In one of the stories we are introduced to the barber (hajam), who frequently, as was formerly the case in England, combined the practice of surgery with the pursuit of his proper vocation. The hajam must be distinguished from the surgeon proper (jarrah, dresser of wounds) and from the professional physician (hakeem), both of whom were no doubt more highly esteemed as specialists in their profession. In the story in question, one of the characters, the first dervish, relates that he found a lovely lady, a princess, lying wounded in a box beneath the wall of a certain city. He went to look for a jarrah, but was recommended to the house of a hajam. "There is a hajam," he was told, "riply skilled in the healing of wounds and in the science of hakeem. In this work he is so ripely skilled that if a corpse be taken to him, by the orders of God he will make a plan by which it will at once rise up alive."

The name of the Barber-surgeon was Isa, and he did not belie his reputation. The Dervish hastened to the house and there found the hajam, a white-bearded man, sitting in a portico superintending the labours of several other men who were pounding materials for the preparation of an ointment. Apparently Isa was in a position to make his attendance on a case a matter of favour, for the dervish expressly says "I flattered him into going by treating him with great respect." Incidentally he told a good many falsehoods about the case, from which it will be observed that in one respect men were pretty much as they still are. The entreaties of the dervish prevailed. "The surgeon, Isa," he tells us, "was an exceedingly kind-hearted and God-worshipping man. He had compassion on my humble words and came to this house with me. The instant he looked on the wounds he gave me consolation. He said by the mercy of God this lady's wounds will be made to heal in forty days"—forty days was usually occupied by any doctor in the cure of any kind of case. "I will make her take the bath of cure."

HIS METHOD OF TREATMENT.

The treatment is thus described:

"This man of God washed all the wounds in neem leaf water and made them clean. Those that were fit to receive the thread he sewed up. As for the remaining gashes, he took a small bag out of his wallet and placed bandages over some, and having put plaister over others he bound them with bandages, and said with extreme kindness: 'I will continue to come twice (daily). Be very careful that she make no movement by which the stitches may be torn. Give chicken soup for her food; pour it down her throat, and frequently give

extract of musk willow with rose-water that strength may remain.' Having said this, he requested permission to depart."

HIS SOCIAL STATUS.

The position of the barber-surgeon of the East seems to have been superior to that of his contemporaries in the West. He sits at his ease in the portico of his house watching his men at work, and must be approached with respect and entreated to attend. He is described as kind-hearted and religious. He appears also to have had not a little skill in his subsidiary profession. There is no suggestion of charms or magic such as were probably employed by other Eastern practitioners of the time. He examines his patient, gives a prognosis, comforts the friends, and discriminates in his treatment of various kinds of wounds, the remedies for which he carries with him in his wallet. He understands the use of sutures, and knows that all wounds are not suitable for suture. He impresses on the friend of the patient the necessity of rest for healing and of food and stimulants to keep up the patient's strength. His present-day successors could do little more than Isa did for this poor lady. His contemporaries would probably have ordered boiling oil and bleeding. His manners are courteous and polite; he asks permission to depart—an Eastern courtesy—and he receives gratitude and ceremonious respect from the patient's friends. The dervish displays his gratitude and respect by words and actions. "I stood," he says, "with joined hands and said, 'By your kindness my life is saved; but for you nothing was left me but to die. May God's peace rest on you.' I gave him attar and pam, and permission to depart." Still in the East attar is sprinkled on, and pam given to, the departing friend or guest whom it is desired to honour.

The dervish nursed the lady with devotion. The hajam paid frequent visits. "In a short time the wounds filled up and formed grapes"—an excellent description of healthy granulations. "She took the bath of cure." And the hajam received a liberal fee. "I piled up robes of honour and golden coins before Isa the barber," says the chronicler in concluding his narrative. What was the exact amount of the hajam's fee we are left to imagine; definite statistical information was, apparently, as distasteful to the dervish as it is to some modern chroniclers.

SOME OF HIS REMEDIES.

The neem referred to in this narrative is a large tree, common in India and resembling the English ash. Both a decoction and a poultice of its leaves, which are bitter to taste, are held in great estimation by the natives as a remedy for wounds and sores. The use of rose water requires no explanation. It was very frequently ordered, and was a favourite in the Indian Pharmacopœia. As to the musk willow, the present writer is unable to speak of his personal knowledge; it is said to be a scented variety of willow. The "bath of cure" or convalescence appears to have been ceremonial rather than curative, inasmuch as it is always spoken of as being taken after the patient has recovered from his wounds. In a case such as that which has been recorded, it adds the indispensable touch of Oriental ceremony to a course of treatment in other respects thoroughly practical.

RESIDENT MEDICAL OFFICERS' DEPARTMENT.

HEALTH OF RESIDENTS.

WHEN one considers the arduous and responsible duties and the scanty leisure of a house surgeon's life in most large hospitals, the wonder is, not that some fall sick and have to resign, but that any complete their appointments. A year's hard work in hospital is a fairly severe test, even of the strongest constitution, and it is remarkable how many men of only moderate physique come through this ordeal without damage to their health. The reason must lie in the fact that congenial labour, however onerous and exacting, is seldom harmful, so long as it is varied and interesting. Fortunately, most hospital residents are really devoted to their work, and find keen enjoyment in the skilful performance of even the duller and most distasteful of their duties. Were it otherwise, there would doubtless be many more cases of mental and physical breakdown among house officers than there are at present.

A newly-qualified practitioner, before entering upon his duties as a house surgeon, would do well to read and take to heart, the admirable advice which is given in the Introduction to Heath's "Minor Surgery," on the subject of the care of his own health during his life in hospital. Written many years ago by the late Christopher Heath, these few sentences are just as true and as pertinent at the present day as they ever were; and, in spite of the changes and elaborations in the duties of a house surgeon, the advice given is still practicable.

An adequate supply of good food to the medical officers' table is essential, if their work is to be done well. This is a point which hospital committees have begun to realise. The food should also be attractively served, and here the committees are not always so considerate: they do not all seem to understand that the appetite must be tempted when the work, if not exactly sedentary, is, at any rate, performed in close wards and stuffy out-patient rooms, amidst sights and smells which are not calculated to give a relish to an ill-served, even if perfectly wholesome, meal.

The relief of the sick poor has naturally the first claim upon the resources of a hospital, and the strictest economy in the administration of the charity is, of course, expected of its governors. But economy need not be carried to its extreme limits at the dining-table of the resident staff. Interrupted meals are often unavoidable; but the fare need none the less be appetising.

Fresh air in anything like sufficient quantity is difficult for a house surgeon to obtain. But, except when he is "taking in" or "on duty," it is usually possible for him to slip off every day for at least an hour's walk on the Embankment or in one of the parks; and on Sundays a longer outing is generally within his reach; if he makes up his mind to get it. Even an hour in the open air is better than nothing, and when it is regularly taken the advantage to health and spirits is very great. The open bedroom-window and the morning cold bath need not be

insisted on here, for no sane house officer nowadays neglects these obvious duties, but we might suggest that a few minutes with dumb-bells or a "developer" before the bath are an excellent preparation for a day's hospital work, when other exercise is out of the question.

It must be owned that to seize every small opportunity for fresh air and exercise needs some determination. It is, no doubt, easier to spend a spare hour with a book and a pipe in one's room rather than to make arrangements with a colleague and go for a walk or a bicycle ride, or even for an airing on a motor 'bus; and there is some truth in the objection that an ordinary day's work is usually a sufficient test of the will-power without exercising it in off-duty hours. But the resulting gain is worth the effort.

Night work is a trial of nerves and health which cannot be avoided, and it often happens that the most broken nights follow the hardest days. The man who can take a little or much sleep when and where he chooses is as rare as he is fortunate. To most men a thrice disturbed night means a night without any sleep at all, and a miserable day to follow. Happily, much night-work at a stretch is not common in hospital. Even if he anticipates being called back to the wards during the night, the resident should go to bed immediately after his night round, and should enjoy as much sleep as he can before the summons comes. It is sheer foolishness to sit in a chair fully dressed, perhaps for hours, with aching eyes and weary limbs, consuming tobacco and whisky long after the pleasure has gone out of them, just because "it isn't worth while going to bed when you're sure to be knocked up as soon as you're asleep."

Night work is, indeed, the worst part of a doctor's life, and in hospital it is just as trying as in private practice. For although the general practitioner has to dress more fully and to go longer distances, the house surgeon is often sent for because he is at hand and is bound to come, although it is clear he can do no good, when—under like circumstances—the country doctor would usually be spared.

An occasional week-end visit to the country, in addition to the summer holiday (which, it is to be hoped, is always insisted upon), is a great relief from the strain of hospital life. It is just long enough to break the monotony of work and to fill the lungs with fresh air, and just short enough to avoid the unsettling effect of an ordinary holiday. Its good effect is often quite remarkable.

Many house surgeons at the outset of their appointment promise themselves that in their spare evening hours indoors they will systematically read up their cases, or study for the higher examinations. Very few, however, succeed in keeping these promises, except in the most desultory way. It is, indeed, doubtful whether most men are not better employed after a hard day's professional work in

relaxing their minds rather than in spurring them on to further efforts of the same sort. We admit that a certain amount of reading up of cases is essential for the good of their patients and the better education of themselves. But all work and no play makes dull house surgeons, and a couple of rubbers of bridge, or a game of billiards, is a better preparation for a good night's sleep than is an hour spent in feverish efforts at reading pathology for the final F.R.C.S. Certain hospital appointments are notoriously easier than others, and the holders of these would indeed be foolish if they did not use their ample leisure hours for the purpose of professional study; but the foregoing advice applies to the majority of resident medical officers, and especially to house surgeons, whose work is usually the most exacting of all.

It is a common procedure for the more ambitious

men to take successive house appointments, sometimes at the same institution, more commonly at different hospitals, and thus to obtain a large and varied experience. We would urge all but the strongest of these to see to it that an interval elapses between each appointment, even if this means the loss of an attractive post. A short voyage as ship's surgeon provides an ideal holiday after a year's work in hospital; and the time thus spent is not wasted, for much reading can, if necessary, be done on board ship, and the opportunity for travelling and seeing something of foreign lands is one which may quite possibly not occur again for many years.

We have now outlined the house surgeon's duty towards himself, and we would conclude by reminding him that without due attention to his own health he will sooner or later be unable to perform his duty towards his patients.

THE RESIGNATIONS AT THE SHEFFIELD UNION HOSPITAL.

We have lately received a cutting from the *Sheffield Independent* of April 13, in which attention is drawn to a serious state of affairs now existing at the Sheffield Union Hospital. According to the writer of the article, the three medical officers attached to this institution have recently resigned. This, in itself, would merely point to some grave dispute between the residents and the hospital committee, for which either party might be to blame. But when the article goes on to say that no fewer than eight medical residents have left this hospital since June 29 last, it becomes clear that there must be something fundamentally wrong with the attitude of the hospital authorities towards the resident medical staff.

It is almost inconceivable that in nine months eight medical men should resign important offices in the same hospital without adequate reasons for so doing. We cannot, in justice to our profession, assume that the fault lies anywhere but at the doors of the Sheffield Union Hospital Committee. Wounded vanity or petty resentment might account for one, or even two, of these sudden exits—such things have happened before in other hospitals, and will no doubt happen again—but it would be both wrong and foolish to apply this explanation to a series of eight resignations.

Inquiries made by the representative of the *Sheffield Independent*, among those behind the scenes, have brought to light certain facts which, in the absence of evidence to the contrary, support our belief that the hospital committee are entirely to blame for the present *fiasco*. It appears that in March 1906 the Local Government Board issued special orders, intended to increase the authority and strengthen the position of the medical officers of this institution. These decrees found so little favour in the eyes of the committee that it only published that part which defined the actual duties of the doctors, and suppressed the sections showing that the medical staff had the supervision of other officials. At every point the committee seem to have disobeyed the spirit of the Local Government Board's commands.

The article then enumerates several incidents, which, if they are true, are sufficient in themselves to justify the resignation of successive medical officers. The committee really seem to have neglected no detail which could possibly cause friction between the medical and administrative staffs, and to have done everything in their power to weaken the authority and ignore the rights of the resident medical officers. And, as always happens in such cases, the real sufferers have been the 400 patients, who, at the time this article was written, were presumably left without any organised medical attention whatsoever. For their sake it is to be hoped that the local practitioners were willing to give temporary aid to them in their unfortunate plight. But we trust that the committee have been less successful in finding candidates for the posts of resident medical officers, in the absence of an express undertaking on their part to amend the error of their ways.

NOTES, QUESTIONS, AND COMMENTS.

THE editor of the Resident Medical Officers' Department of THE HOSPITAL invites contributions to this column both from resident medical officers and from other members of the profession. Short articles, notes, queries, or suggestions bearing upon this branch of medical practice will always receive careful consideration, and those that are suitable will be published in due course. Correspondence, short and to the point, is particularly invited, as by this means the value of the R.M.O. Department will be greatly increased.

Articles, whether in the form of letters to the editor or otherwise, should in no case exceed 600 words in length, and should, if possible, be shorter than this. Postcards with short notes, questions, or notifications of recent hospital appointments will be welcomed.

All communications for this column must be guaranteed by the name of the writer, which will not be published unless he expressly wishes it, and should bear the words "R.M.O. Department" on the envelope or the address side of the postcard.

Items of news from the resident officers' quarters of the principal hospitals, infirmaries, and asylums throughout the kingdom are invited, and, when of sufficient general interest, will be published.

The editor will also be pleased to receive and reply to confidential communications from resident medical officers and to consider any suggestions that may be made for the improvement of this department of THE HOSPITAL.

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

THE ADMISSION DEPARTMENT OF A GENERAL HOSPITAL.

II. ITS THOROUGH SUPERVISION.

(Concluded.)

In every well-appointed and properly managed hospital, a porter will be at hand when the patient arrives at the entrance. In the first instance a careful note is made, on the forms provided for this purpose, of the following particulars regarding the patient: Date, full name, age, full address, occupation, religion, whether married or single, the exact time of admission and the time when the patient is seen by the medical officer, whether there is, or is not, any infectious disease in or near his residence, whether patient has previously visited that or any other hospital, whether patient is in receipt of parochial relief, and any other detail that might be useful in the future management of the case.

For example, it is important that the number of the flat in which he resides should be noted, so that in the event of any urgent message being conveyed (say by night) to his friends there may be no difficulty in finding the exact location of the dwelling. This applies more particularly to Scottish hospitals. While a porter is obtaining all the details from such relatives or friends as may accompany the patient, the medical officer will have been summoned. The following is a copy of the form:—

| | |
|---|---------------|
| Date, | |
| Name, | Med. or Surg. |
| Age, Country, Religion, | Soc. Cond. |
| Occupation, | |
| Residence, | |
| Infectious disease in or near Residence, | |
| Previous visits to this or other Hospitals, | |
| Does Patient receive Parochial Relief? | |
| Subscriber's Letter or Doctor's Recommendation, | |
| Other Letter, | |
| Entered by | Time, |
| Examined by | Time, |
| Result, | |

Every patient seeking admission should be carefully examined by the medical officer on duty for the day, and, as already stated, no patient should be refused admission until he is seen by the medical superintendent or his deputy.

Should the medical officers on duty consider any patient unsuitable, they will fill in the following form for transmission to the medical superintendent and await his decision:—

We hereby certify that we have examined
and do not consider that he is a fit patient for admission
into the Infirmary as

Supt. Resident Assistant.
Resident Assistant.

It then rests with the medical superintendent or his deputy to see the patient and give a final decision.

If the case is a suitable one, the porter will receive instructions to convey the patient direct to the ward to which he is assigned, and in male cases he may be required to assist in undressing him. This he should do with as little inconvenience to the patient as possible. If there is no special urgency, the medical officer gives instructions for the attendant to remove the patient to the bathing department, where he is stripped and bathed. His clothes are treated in a disinfectant, if necessary, and are thereafter stored till his discharge, or are sent home with any relative who may accompany him. After the patient is bathed, he should be wrapped in hospital garments, covered with blankets and removed to the ward. A careful note should be made of all money or valuables in the patient's possession, and such valuables should be handed over for lodgment in the safe. Special care should be exercised in the bathing of children and helpless patients.

The nearest relative present should accompany the patient to the ward and be allowed to remain till the house surgeon on duty has obtained a history and full details of the case. Before leaving the hospital the relatives should be furnished with a visiting card giving the visiting days and hours and the rules to be observed in visiting patients. Any correspondence which accompanies the patient from his medical adviser should be handed at once to the medical officer on duty, and should accompany the patient to the ward in order that the house physician or surgeon under whose care the patient is placed may have the fullest information available. Neglect in the observance of this simple rule may cause much confusion and delay in the subsequent treatment of the case.

If there is any suspicion that the patient suffers from any infectious or contagious disease, he should be retained in the examination-room till after consultation with the medical superintendent. If the case proves infectious, the room should be closed, the sanitary authorities notified, and the patient removed to a hospital for infectious disease at the earliest possible moment. Before this room is used again it should be thoroughly disinfected and washed down. The walls of these consulting-rooms being tiled, this can be expeditiously and inexpensively accomplished.

When any case of poisoning is admitted, the house physician should deal with it on the spot. An "emergency outfit" containing stomach-pump, antidotes, and everything which might be required, should be fitted up in a sealed cupboard in a small emergency dispensary, etc., near the admission

department. The object of the seal is that the dispenser may see every morning whether the apparatus and contents have been used, in order that he may put in a fresh supply, so that no possible emergency can occur without the fresh remedies being at hand. It is always advantageous to have a description of the usual antidotes for use in case of poisoning in this same cupboard. Figs. 1 and 2 illustrate such an emergency dispensary as referred to, with cupboard containing antidotes and serums, also cylinders of oxygen and emergency drugs.

If a criminal case or an attempted suicide is admitted, the medical officer on duty should notify the police authorities at once, unless there are special reasons for omitting this procedure.

When a patient is admitted seriously ill and there is immediate danger to life, the relatives should be informed without delay.

KEEPING RECORDS.

The following records should be kept in the admission department:—

1. A general register, giving the date, number of patient in this journal, name, number in surgical or medical journal, age, whether married or single, full

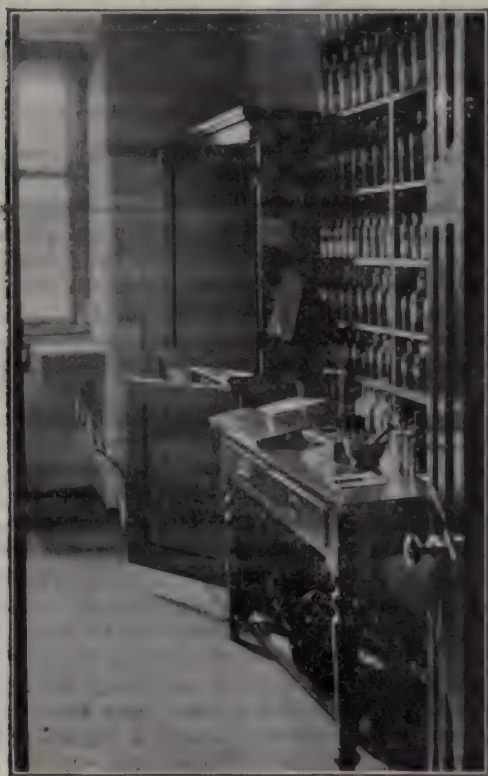


FIG. 1.—EMERGENCY DISPENSARY—ANTIDOTE CUPBOARD.

address, recommender (employer or doctor), accident or emergency, whether from out-patient department, nature of ailment (whether medical, surgical, gynaecological, etc.), a note of the medical officer who examines the patient, and the ward to which the patient is sent. A column should be reserved for "remarks." This journal should contain a record of every patient who seeks advice or

admission, whether treated or not, as separate admission journals must be kept for the in-patient and the out-patient departments.

2. A bed-book, giving each day the number of patients in each ward in the hospital, dividing the males from females, noting the number admitted, dismissed, and died. The same book should contain a record of the name, age, and number of the ward



FIG. 2.—EMERGENCY DISPENSARY—OXYGEN CYLINDERS.

of each patient admitted and dismissed, giving at the foot a summary of the total number admitted to each department, and the total number of patients in the hospital each day.

3. A medical and surgical register, giving the date, number on the general register, number of ward, age, country, whether married or single, occupation, full address, recommender or medical adviser, number of days the patient has been in the hospital, nature of disease or injury, date of dismissal, and result; and a space should be reserved for "remarks," such as cause of death, reason for dismissal, whether patient was sent to convalescent home or received assistance, such as from the Samaritan Fund, etc.

4. An abstract-book, giving a summary of these details in order that the number of patients in the hospital can be compared from day to day, month to month, and year to year.

5. In addition to these records, an alphabetical index of every patient admitted to hospital should be kept up to date and available for reference, giving the patient's name, the number of the ward, and the date of admission and dismissal.

THE Town Clerk of Paddington has informed the various Borough Councils of the Metropolis that the proposed conference on the Prevention of Pulmonary Tuberculosis has been postponed from May 1 to May 6.

THE following changes, we understand, are under consideration at St. Bartholomew's Hospital: in the gynaecological department the staff is to be strengthened by the appointment of an assistant physician accoucheur; while in the aural department a new appointment, that of assistant aural surgeon, is to be created. The hospital is also to be fitted with a thorough internal telephonic exchange system. It is pleasant to record that the present management of this our oldest hospital in London is so actively keeping in touch with modern advances.

CURRENT HOSPITAL TOPICS.

The Hospital Chapel.

A CENTURY ago, every new hospital of importance had a chapel, which was regarded by our forbears and sires as an essential portion of every "God's House of Pity," as these institutions were then regarded. In the subsequent decades the evolution of the hospital chapel has in some cases resulted in its extinction; in others it has led to the wise modification of associating the chaplaincy with the vicar of the parish in which the hospital is situated; whilst in others, again, the chapel has become the Valhalla of the heroes and devoted workers who have added to the reputation of the hospital, or whose lives and example have influenced others for good. The chapel at the *Dreadnought Seamen's Hospital*, Greenwich, is becoming a most interesting feature in modern London hospital life. It contains memorial windows recording the services of members of the medical staff and lay officials. It is endeared to the hearts of all who have been associated with the institution by many memories and special services of commemoration and worship, the latest of which has a special interest for hospital officials throughout the metropolis. It is pleasant to note the arrangements of this chapel, with its altar window illustrating the Parable of the Good Samaritan, together with the various gifts which beautify the altar and add a special interest to the chapel itself. The mere size of the staff of a modern hospital renders the chapel an important feature in its administration, and we should welcome a description, with illustrations, of every such chapel which has endeared itself to any hospital worker.

Memorial to the Late Mr. Walter Adams.

On Sunday, April 13, Mr. Percival A. Nairne, chairman of the *Dreadnought Seamen's Hospital*, unveiled a memorial tablet in the chapel of that institution. When Mr. Nairne drew aside the Union Jack which covered the oak tablet, it was seen to bear the following inscription:—

Walter Adams, Assistant Secretary. Born September 23, 1850, died March 6, 1906. To commemorate his service of thirty-five years in the Seamen's Hospital, his fellow-workers have raised a fund to bear his name and to augment the benefits of the Samaritan Fund, which he managed, with so deep and thoughtful an interest, in the cause of sick and needy seamen.

Mr. Nairne, who had known him for thirty years, testified to Mr. Adams's gentle disposition, his helpfulness to his seniors and to all who came in contact with him as a centre of information, his loving devotion to the interests of every convalescent patient who left the hospital. Medical officers, surgeons, nurses, and servants, all received courteous and kindly help from him, and he left a fragrant memory and an example stimulating all who were connected with the hospital. The Rev. S. Udny,

Vicar of West Misted, Hampshire, gave an address, based upon the words, "Go thou and do likewise." In that chapel this gospel was always before their eyes, with the Master's words, "Take care of him." It was characteristic of Mr. Adams that he never lost faith, however bad a case might seem to be, for he had the gift of being able to put himself in another man's place, and to do for him what he would have had done for himself. He not only served the hospital, but Him in Whose name all hospitals must work. Without one word to help himself, Mr. Adams helped others by his deeds, and patiently bore the burden of those who were down in the world. He thus fulfilled the law of Christ. The whole service was impressive; the hymns were well chosen, and their memory will lovingly linger in the hearts of those who were present.

Hospitals as Colleges of Hygiene.

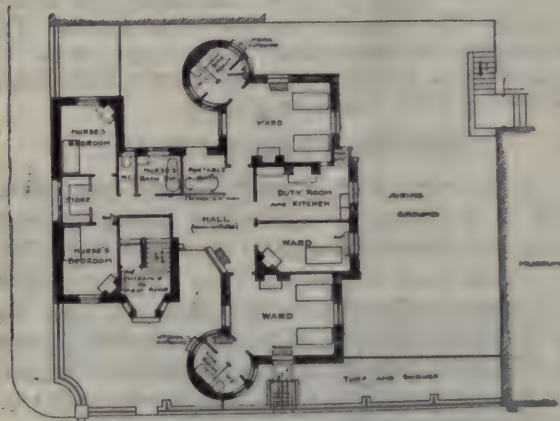
IN the report of the Stepney Visitors' Association, Dr. S. B. Atkinson suggests that among the work expected from our hospitals should be that of instructing those who attend them in the principles of health. Dr. Atkinson points out that the etiquette of the profession often hinders private medical men from giving demonstrations in hygiene in their own neighbourhood, and no one would wish the professional discouragement of what is often an insidious form of self-advertisement to be lessened. But the officials of our hospitals are in a different position from private practitioners; they are free from the suspicion of self-seeking, if, in addition to treating and nursing their patients, they give them some instruction in the laws of health. In-patients, and especially convalescents, whose energies are beginning to return, and who are apt to find time hang upon their hands, might be easily reached; but out-patients, who often need advice as to the management of their home life as much as the medicine for which they come to the hospital, would need to be dealt with by accredited health visitors, who would follow them up and give friendly advice and information. Working men and their wives might be gathered at meetings convened under the auspices of a religious or philanthropic association, and school children taught hygiene as part of their regular course of study. But the lecturers and the visitors would be accredited from the hospital, and should in fact be regarded as part of its staff. They would require to be paid from its funds; and as this is an entirely new departure, it is probable that the suggestion would require to come in the first place from subscribers or donors of a considerable amount. If the great hospital funds were to give the scheme their support, there would be little difficulty in carrying it through; but perhaps this could hardly be expected until it had been tried, experimentally, and proved useful. If successful, however, there is no doubt that the scheme which Dr. Atkinson outlines would add to the efficiency of hospitals by making them as powerful for the prevention as they are now for the relief of disease.

BRISTOL GENERAL HOSPITAL ISOLATION WARDS.

THIS is a small two-story detached building erected in a courtyard on the northern boundary of the hospital. The accommodation provided on each floor consists of two wards for two beds and one ward for one bed, with a nurses' duty-room. Four bedrooms, a bath-room, and a sitting-room are provided for nurses. To each of the two-bed wards a w.c. and sink-room is provided in circular turret and on each landing is a portable bath.

BRISTOL GENERAL HOSPITAL.

Ground Floor Plan.



First Floor Plan.



SCALE OF 0 10 20 30 40 50 Feet.

The *raison d'être* of a two-bedded ward for isolation purposes is never very apparent, but surely here was an excellent opportunity of applying the principle, now so well-established, of single rooms separated by glass partitions, as exemplified at the Pasteur Hospital, Paris. Five separate rooms opening on to a common corridor, with a nurses' room commanding the whole, would have provided means of isolating five separate diseases. A single sanitary block would have sufficed in place of the two, and the supervision would have been far more effectual than it can possibly be in the three separated rooms. Apart from this criticism,

the building is, with one exception, well and carefully planned. The exception we refer to is the form of the sanitary towers. Anything more inconvenient than a circle for this purpose it is difficult to conceive; and we can only suppose that this form was adopted for some architectural reason not apparent from the plan. The architects were Messrs. Oatley and Lawrence, Bristol; the contractor was Mr. R. F. Ridd; and the warming has been carried out by Messrs. J. Crispin and Sons. The cost is not stated.

EDITOR'S LETTER-BOX.

THE GENERAL PRACTITIONER AND THE CONSULTANT.

SIR,—Your leading article, following so closely upon the recent correspondence in the *British Medical Journal*, indicates the feeling of suspicion and distrust which exists among many general practitioners as to the honesty of the consultant.

I am well aware that there are many consultants—yes, and men with big names—who see every patient that comes to them; who put these patients into homes and undertake their treatment without so much as inquiring if they have been under the care of a general practitioner. These “consultants” usually meet with a just retribution sooner or later, and I do not think the general practitioner need seriously worry his head about them. In fact, the punishment of any unprofessional consultant is so entirely in the hands of the general practitioner that he (the G.P.) can hardly be said to have a grievance.

But there is the other side of the question. Has the consultant no cause to complain of the treatment he receives from the general practitioner? As a young consultant, I say he has very serious cause. Twice within the last few days have I been consulted by patients—one coming from the country—without the knowledge of his doctor, and the other with this knowledge and acquiescence—and in each case I wrote a long and explicit letter to the doctor in attendance.

In neither instance have I had so much as an acknowledgment. I shall, however, go on writing to doctors, because it is an act of courtesy from one gentleman to another, if nothing more; and not because I can possibly think it to my advantage to run the risk of a snub!

I am glad to say it is not always so. I make a habit of writing personally to all those (perhaps humbler) members of the profession working among the poorer classes who are good enough to send their difficult cases to hospital to see me—often with shrewd and wise letters of explanation—and from them I invariably get most grateful letters of thanks.

I make, therefore, my serious indictment of discourtesy against those practitioners in lucrative practice who are too puffed up with their own importance to be even civil to their younger and more struggling brethren, many of whom could, perhaps, have been taking the bread from the mouths of these prosperous ones had they not preferred to submerge themselves (for a time) in working out their own salvation, and that of others, in the laboratories and hospital wards, in order to reach that fame which will ensure respect from the most inflated practitioner.

I appeal to these gentlemen not to treat the younger consultants with the scant courtesy so little deserved.

I am yours, etc.,

SFEB.

NEWS AND COMING EVENTS.

EARL CAWDOR has presented a complete x-ray installation to the Nairn Town and County Hospital.

THE Normans Riding Isolation Hospital near Winlayton, completed at a cost of over £6,000, was opened last week.

MR. STEPHEN MAYOU, F.R.C.S., has been appointed assistant surgeon to the Central London Ophthalmic Hospital, Gray's Inn Road, W.C.

A cot endowed in memory of the late Mr. Roland Philipson has been presented to Newcastle Royal Infirmary by the workmen and apprentices of the North-Eastern Marine Engineering Co., Ltd., Wallsend.

A NEW Infectious Diseases Hospital has been erected at Caerau, Glamorganshire, the architect being Mr. John H. James, of Cardiff. The sanitary arrangements include the "Boyle" system of natural ventilating.

DR. D. DAVIES, who has just resigned the post of medical officer of health for Aberdare, began his connection with the Aberdare Urban District Council as far back as 1854. He was born in 1821, and was one of the "foundation members" of the British Medical Association.

No fewer than 128 competitors entered for the billiard tournament in aid of the Haggerston Hospital Society, and a series of interesting matches has resulted in Mr. R. Robinson winning the first prize, the value of which he has now generously promised to hand over to the funds of the charity. He also presented the runners-up in the competition with miniature silver cups as souvenirs of the event.

HILL's Plymouth (Merthyr) Colliery workmen have decided, by a majority of 250 votes, not to pay an increased subscription annually to the local hospital. When the hospital was extended by two new wards, the representatives of the workmen gave a distinct undertaking that the men would pay an increased subscription. That undertaking was honourably carried out until the Cyfarthfa colliers refused last year to make any increase. The probable result will be a reduction in the number of beds.

A CORRESPONDENT in *Country Life* reports that at the Royal Hospital for Incurables, Putney Heath, is a fox-terrier bitch whose kennel is near to the gardener's cottage. "Not far away is the poultry-house, where suitable and adequate nesting accommodation is provided. Notwithstanding this, several of the hens make a practice of going into the terrier's kennel and there depositing eggs. In order to get to the back of the kennel some of the hens will actually walk over the body of the dog, who apparently allows them to do anything, with the exception of tasting her dinner!"

ON Friday afternoon last Mr. F. Witherington gave a demonstration of "a new process of shaving without the use of the razor." The demonstration, which was exceedingly interesting, occupied about three quarters of an hour, during which time half a dozen faces were shaved by the new method. This consists simply in painting the beard with the special preparation, keeping it moist with a water spray for a couple of minutes, and then removing the hair with a blunt paper knife. The process, of which we hope to give a fuller account in a later issue, is exceedingly simple, and should prove a boon to those who find the ordinary methods of shaving too tedious and too troublesome.

THE foundation-stone of a new hospital at Tullow, co. Callow, Ireland, was laid on Friday last by the Bishop of Kildare.

LORD LOREBURN presides at the Westminster Hospital Festival Dinner, to be held in the Hall of the Inner Temple on Friday, May 10, at 8 p.m.

THERE are only six endowed beds in the Bristol General Hospital. This old institution is finding its accommodation much too small, and is building a new isolation wing at a cost of £12,000.

THE Earl Cawdor, as Treasurer of the London Homœopathic Hospital, Great Ormond Street, W.C., has received a legacy of £2,027 4s. 2d. from the estate of the late Mr. William Bykur, of Poole, Dorset.

THE annual meeting of the Hospital for Epilepsy and Paralysis, Maida Vale, W., will be held on Saturday, April 27, at 3 p.m. at the hospital, 4 Maida Vale (near the end of St. John's Wood Road). A presentation will be made to the Secretary, Mr. Howgrave Graham, on his retirement after twenty-four years of service.

FOLLOWING up the suggestion that different professions and trades might endow beds at the Leeds Consumptive Sanatoria for the use of their members, Mr. Irwin Sawdon, the conductor of the Sunday Symphony Society's orchestra, which consists of a chosen body of about fifty professional musicians of Leeds, will give a series of Sunday concerts in aid of this very deserving cause.

THE annual Spital Sermon at Newgate on behalf of the ancient, royal, and religious hospitals of London, was this year preached by the Bishop of Southwark. The Spital service is an imposing ceremony, attended by the City Corporation in state, but it is usually a small audience that listens to the sermon. It takes place at three o'clock in the afternoon, and was originally instituted for the benefit of five hospitals only—St. Thomas's, Bethlehem, Bridewell, St. Bartholomew's, and Christ's Hospital.

THE Bristol branch of the National League of the Blind calls attention to the large number of adult blind whose condition is described as unsatisfactory, and states that the problem can never be solved by voluntary effort. At present there are about 40,000 blind persons in the United Kingdom, and 20,000 blind adults depend on their own efforts for a livelihood. Of these not more than 15 per cent. are employed in workshops, at an average wage of 7s. 1d. per week, and about 50 per cent. subsist upon the rates, whilst 30 per cent. are "forced into the streets" as musicians or beggars.

THE following amounts have been promised towards the joint endowment for the Hartlepool hospitals:—Messrs. W. Gray and Co., Limited, £2,000; Sir Christopher Furness, £1,000; Mrs. Matthew Gray, £1,000; Mr. G. H. Bains, £1,000; Messrs. Furness, Withy, and Co., £1,000; Messrs. Richardson, Westgarth and Co., £500; South Durham Steel and Iron Co., £500; the Irvine Shipbuilding and Dry Dock Co., Limited, £500; the North-Eastern Railway Co., £200; Hartlepool Amateur Operative Society, £80; Anonymous, £52 10s.; Anonymous, £10; total, £7,842 10s. In addition, Mr. William Cresswell Gray, J.P., has undertaken to add one-third of the amount raised, his individual contribution to be limited to £3,000.

NURSING ADMINISTRATION.

NURSING REFORM.

IN THE HANDS OF THE TRAINING SCHOOLS.

THE ultimate success of the movement in favour of nursing reform lies in the hands of the training schools. The wisdom and administrative ability which, in the course of years, has given the world the trained nurse, is still among us. It is merely a question of a few more years before the same forces will perfect the system, and will take such measures as may be necessary to prevent its deterioration at the hands of irresponsible persons. It often seems to be forgotten that all the training schools in this country, except those of the Local Government Board, are purely voluntary bodies. To attempt to legislate for them before securing their co-operation must be to court failure, and to proceed to move Parliament to legislate for the training schools without consultation with these, and against their better judgment, is but to beat the air. Whatever needs to be done in the way of reform, the schools are pre-eminently fitted to undertake for themselves, and only legislation effected through the combined action of the training schools themselves can have any hope of attaining its object. The training school is composed of three elements: the trustee, as responsible for finding the funds; the examiner, as responsible for the standard of knowledge; the matron, as responsible for the standard of conduct and practical work. Unless these three elements work harmoniously in the evolution of the nurse the training school is maimed. In attempting co-operation for the purpose of legislation, and with the aim of uniformity in view, these three elements must combine, and no one of them can be omitted without danger to the best principles of training.

But the training schools are not only many in number; they are widely separated by situation, circumstances, and traditions. To attempt to ignore local traditions under circumstances affecting widespread interests is always to invite failure. It is certain that Scotch hospitals, let us say, could not cordially cohere in any scheme for nursing reform in which their only part was the selection by the Privy Council of one Scottish representative, and the election, by an irresponsible body of nurses, of a Scottish nurse and a Scottish matron who, if in actual touch with the interests they were supposed to represent, could not possibly attend regular meetings in London. The formation of Branch Councils in different parts of the kingdom would seem to be a preliminary essential to success in constituting a Board of Nursing truly representative of all the great training schools. Such Branch Councils, on which all the training schools in the particular district were strongly represented, and composed, as they would be, exclusively of men and women engaged in the actual work of training nurses, would be in the best possible position for

ascertaining the right people to control nursing education. One such Council for London, two for the provinces, two for Scotland, two for Ireland, might be found sufficient, but the number would be dependent only on the extent to which different counties were prepared to combine for this purpose. The formation of such Branch Councils of nursing would greatly facilitate the election of the Central Board of Nursing, and render it entirely representative of training schools throughout the country. It would also relieve the Board of many duties which would press very heavily on any purely centralised system. It is at least highly probable that one of the first measures undertaken by a Board of Nursing under the direction of the training schools would be the regulation of examinations for nurses at the completion of their course. It is for many reasons desirable that the existing system, under which the nurse is examined in her own training school, should be continued, and the best authorities regard with considerable disfavour the proposal that examinations shall be centralised.

The appointment of examiners, and many minor matters connected with the regulation of the examinations, could more properly be left in the hands of the Branch Councils, acting always within well-defined limits, and thus matters affecting the interests of particular hospitals would have the advantage of being discussed before a committee of experts well acquainted with the local conditions, instead of before the wearied members of a Central Board at the close of a long meeting. It can hardly be too often reiterated that the success of any measure for promoting reform in nursing matters must depend entirely on the degree of spontaneous consent which it can command. The control of nursing education, conducted, as it is, for the most part in voluntary institutions, can only, with any degree of safety to the nurse and to the institution, be lodged in the hands of the training schools themselves. Every superintendent of nurses in a recognised training school ought to be drawn into direct touch with the Central Board charged with making regulations for training nurses. Under the system of Branch Councils matters lying wholly in the matron's jurisdiction would receive the attention of committees appointed from among the matrons of each district, while technical medical and surgical education would be dealt with by committees of those experienced in lecturing. Such a system would free both matrons and medical men from the questions of finance and administration which can be more conveniently undertaken by lay managers. Some such division of labour in the mass of detail which a Central Board of Nursing must face, would in all probability dissipate difficulties which at first sight may well seem insuperable.

THE COMMON TASK.

Correspondence and Queries for this section should be sent to the Editor of THE HOSPITAL, 23 Southampton Street, Strand, London, and marked "Nursing Administration."

THE CARE OF MILK IN INSTITUTIONS.

IN an ideal hospital system the milk is watched over during the whole of its transit from the cow to the patient. In provincial hospitals it would be perfectly feasible in most districts to follow the admirable plan at Addenbrooke's, Cambridge, where the whole milk supply is derived from one farm in the neighbourhood, which is open to inspection by the authorities. But in London, in the existing state of the milk trade, this cannot be managed. The concern of the hospital with the supply begins at the delivery of the milk on the hospital premises by the contractor. The practice of sterilising the milk on its arrival is now almost universal. When this is done the milk is delivered direct into the kitchen, and the first process, that of measuring it, is gone through. The quantity received is carefully checked by the steward or housekeeper, and a specimen is drawn off to be tested by a lactometer, that the proportion of cream may be ascertained. In most contracts for milk a proviso is inserted that the proportion of cream shall not fall below a stated figure. As it is quite easy to adulterate milk in such a way that the percentage of cream is artificially raised, it is essential that from time to time the milk should be analysed, and every month or two a specimen should be drawn off on arrival, sometimes from the morning, sometimes from the afternoon, milk, and sealed up for analysis by someone in authority. After measuring, the milk is poured straight into the steriliser.

It may be thought superfluous to dwell upon the importance of using for sterilisation a vessel kept exclusively for this purpose. Yet in a large institution the writer saw quite lately large boilers used promiscuously for the making of soup, the boiling of vegetables, and the sterilisation of milk. Such a practice, to say the least of it, throws an undue strain on the vigilance of the kitchen staff. The Benham steriliser in use at University College Hospital, where something like 40 gallons of milk are daily dealt with, is excellent in design; it consists of a copper inner pan, galvanised wrought iron jacket, and water jacket between jacket and pan, fitted with copper steam coil and water gauge. The price of the 30-gallon size is £31. An indicator is attached to the thermometer within, and it thus requires the smallest amount of attention by the cook. The "scum" which gathers on the surface is carefully strained, so that the cream is as far as possible returned to the milk, but there must always be—and this is one of the drawbacks to sterilisation—a certain proportion of "scum" left. The cook can, however, turn this to very good account, and a pint of good clotted cream may be expected to result from every 20 gallons of sterilised milk. When the milk has been ten minutes at a temperature of from 200 to 210°, it is allowed to cool off, and is then poured into covered cans for despatch to the wards, the quantity required in each ward being carefully

measured out in conformity with the requisition sheet. It is stored in the ward kitchens in these covered cans, and is thence issued direct to the patients.

Where sterilisation is not practised, the dairy or larder in which the milk is received and stored is of the first importance. A cool aspect, good ventilation, a stone floor, and clean whitewashed walls, will constitute a larder in which no trouble is likely to arise with the milk, but if slate slabs and white tiling can be had a better appearance can be made. In no case should any article except milk and butter be found therein. The difficulty begins when the supply is despatched to the ward kitchens, where, under adverse atmospheric conditions, unboiled milk will need very careful watching. In some hospitals the milk is sterilised in the ward kitchens. Comparatively simple apparatus is required for this purpose, merely an ordinary milk warmer, consisting of an urn lined with earthenware jar and fitted with "water jacket," but taken collectively the time spent over the process in the various wards is considerable, and constitutes a certain waste of labour. Inaccuracy in measuring is responsible for most of the waste which takes place in the milk supply in institutions, and it may be taken as an axiom that waste of this article of consumption is more usual in small hospitals than in large ones; for precautions which are taken as a matter of course over an amount of 50 gallons or so, are often omitted altogether over five.

Nearly everybody is agreed that sterilisation is merely a necessary evil pending the purification of the milk supply, and the question is inextricably connected with the problem why there is always a little black sediment at the bottom of a glass of milk. From a thoroughly hygienic dairy, milk properly cooled and conveyed in clean vessels, and uncontaminated at any point in its travels, remains sweet for three days at the least. Why should not this be always the case?

CORRESPONDENCE.

Convalescents.

The Rev. Herbert E. Gunson, chaplain of the Middlesex Hospital, writes:—In your issue of the 6th inst. I have seen your kind notice of the valedictory service held in the chapel of this hospital for patients about to proceed to our convalescent home at Clacton-on-Sea. Will you allow me to correct a slight mistake in your paragraph? The service is not held once a fortnight, but every week, and although intended primarily for the patients proceeding to our Clacton Home, we welcome all other patients, and, indeed, all who are able to attend. The service has been held regularly without break for several years, and never exceeds half an hour in length.

GENERAL PRACTITIONERS' CONTRIBUTIONS.

Important.

We propose to devote a special page to General Practitioners' Contributions. We therefore invite from practitioners contributions based upon their experience in the management of cases, and in the treatment and diagnosis of disease; especially shall we be prepared to welcome articles dealing, practically, with treatment, and with the use and value of new remedies and methods.

No article should exceed 1,100 words in length, and, if accepted, one guinea will be paid to the writer after publication. Each communication should be accompanied by a stamped directed envelope for the return of the MS. if found unsuitable. See coupon on Special Supplement.

NOTICES AND ANSWERS TO
CORRESPONDENCE.

ALL MSS., letters, books for review, and other matters intended for the Editor, should be addressed to:—

THE EDITOR,
The Hospital Building,
28 and 29 Southampton Street,
Strand, London, W.C.

Contributions.

Contributions should be written, or preferably typed, on one side of the paper only, and all articles sent in are accepted upon the distinct understanding that they are forwarded to THE HOSPITAL only.

Correspondence.

Correspondence on all subjects is invited, but no communication can be entertained if the name and address of the correspondent are not given as a guarantee of good faith, but not necessarily for publication. All correspondents should write on one side of the paper only.

Books for Review.

Publishers are particularly requested to send advance proofs of any new books of importance, whenever possible, as the Editor has made arrangements to publish immediate reviews, and on a new plan.

The Relaxations of Medical Men.

We shall also be glad to pay for accepted contributions, from any member of the profession, on the subject of the relaxations of practitioners. This opens up a wide field, as it includes natural history, photography, sport, indoor recreations, and motor-ing. Whenever possible, original illustrations and photographs should be sent with the MS.

Suggestions Invited.

The Editor will welcome suggestions for the establishment of any new section in THE HOSPITAL, and will be glad to supply information on any subject of interest or importance to members of the profession in any part of the world.

BUSINESS NOTICES.

Letters relating to the Publishing, Sale and Advertisement Departments must be addressed to the Manager (*not to the Editor*):—

THE MANAGER,
The Hospital Building,
28 and 29 Southampton Street,
Strand, London, W.C.

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The Hospital

A JOURNAL OF

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SATURDAY, MAY 18, 1907.

LUNACY CERTIFICATION IN SCOTLAND.

THE position in which the medical profession in Scotland is placed in relation to the certification of lunatics is an eminently unsatisfactory one. Indeed, it involves personal risks to which no member of the community ought to be asked voluntarily to subject himself. In such circumstances it is inevitable that individual practitioners will decline to accept these risks, and as a result a certain number of lunatics who ought in the interests of the safety both of themselves and others to be under restraint, will remain free to exercise their dangerous possibilities. It is necessary to say this at the outset in order to make it quite clear that this is not merely a question which concerns the doctors. On the contrary, it is a matter of much more importance to the public than it is to the medical profession. And if the public can only be aroused to the dangers inherent in the present position, we cannot doubt that they will promptly take decided action with a view to their own protection. For it is quite certain, that so long as a medical practitioner is liable, as he is in present circumstances, to suffer the risks and expenses of an action for damages whenever a lunatic who has been certified by him is released from an asylum, so long will members of the profession be forced to protect themselves by abstaining from accepting the responsibility which the granting of a lunacy certificate involves. There is, be it understood, no question here of the practitioner's honesty and good faith, and no suggestion of conspiracy or malice. In the exercise of his best judgment, with all due care, and in accordance with the requirements of the law, a medical practitioner certifies a person to be insane. This is a step taken directly in the public interest. It requires, therefore, public protection. In the present circumstances that protection is not provided. Unless it is provided medical practitioners will be compelled to consult their own immediate interests and safety and to leave insane persons to such control as can be exercised by relatives and by the chance interference of the police.

The protection here demanded for the medical profession can readily stand upon the justness of its own claim. But it receives support from the attitude which the State adopts in these very same cases to those who follow the profession of the law. And

the direct responsibility for the confinement of a lunatic, it must be remembered, is taken, not by the medical practitioners concerned in the case, but by the judicial authorities. What the medical practitioners who sign the necessary certificates do in substance is to act as witnesses. Their evidence is submitted to the judicial officer appointed for that purpose, and it is upon his order and under his authority that the alleged lunatic is removed to and confined within an asylum. Yet in the event of the lunatic recovering his sanity he cannot, on his release from the asylum, bring an action against the sheriff (the judicial officer concerned in these cases in Scotland) who has authorised his detention. The sheriff's action is privileged, and is therefore not liable to be called in question on the initiative of any private suitor. But the medical practitioner enjoys no such protection. He may be sued for damages, and even though the verdict is given in his favour he will be made to suffer much anxiety and loss of time, not to speak of the frequent impossibility of obtaining the payment of his costs as decreed against the unsuccessful suitor. The argument may be placed on still higher ground. The medical certificate of lunacy, as has just been stated, is essentially a piece of written evidence. Had this evidence been given by word of mouth and in the witness-box of the sheriff's court it, like the sheriff's judgment, would have been privileged; it could not, therefore, have been made the basis of an action against the witness. But under the present law, though the written certificate of the medical practitioner is essentially evidence, and evidence on which the sheriff may or may not act, though the sheriff himself is protected, and though oral evidence generally is privileged, the medical witness in these cases is left exposed to all the risks above described in the event of the lunatic at any time regaining his freedom. Such a position is fundamentally unjust, and until it is altered medical practitioners cannot be blamed for declining to act in cases of suspected lunacy.

That the propositions here stated are actual and not merely academic is painfully evident from the facts of a recent case. Two medical practitioners certify a patient to be insane, and, on the order of a sheriff, the patient in due course is removed to an

asylum. Subsequently a question of his release is raised, and after an inquiry he is set free—again on a sheriff's order. He then sues each of the doctors for £10,000; a verdict with costs is given against him, but the costs cannot be recovered, that is, each of the doctors has to pay to his own legal advisers and representatives a sum of about £600. Still later they have to meet an attempt to raise a second action in the courts. In the meantime the released person takes the opportunity to fire three revolver shots at, and seriously to wound, one of the doctors. Now we are not in the least questioning the good faith or ability of the sheriff who ordered this man's detention, or of the sheriff who set him free. Nor

do we for a moment suggest that anyone who believes himself to be injured as a result of these legal orders should have a right of action against the individuals who issued them. The sheriff in each case was engaged in the public service and was acting, to the best of his judgment, in the public interest. But exactly the same is true of the medical practitioners, and what we demand is that the protection already enjoyed by the legal officer should be equally extended to the medical officer. Let this be clearly presented to the public, and their sense of justice will endorse it as a demand which is necessary to their protection. For it is no light matter to members of the community to have a number of uncontrolled lunatics in their midst.

THE MILK SUPPLY OF HOSPITALS.

RECENTLY a conference of delegates from nine hospitals was held in the board-room of the Hospital for Sick Children, Great Ormond Street, and after discussion various resolutions were passed concerning the milk supply. Put shortly, the conference recommended that the hospital committees shall insist on a supply of pure, genuine, unadulterated milk, from healthy cows which are examined quarterly by a veterinary surgeon; that the milk shall contain at least 3.50 per cent. of butter-fat; that the hospitals shall have the right of inspection of the source of supply at any reasonable time; that the milk shall be strained and refrigerated at the farm, canned and sealed there, and delivered sealed at the hospital; that it shall not be "pasteurised" without the written sanction of the hospital authorities; and that the milk shall be tested bacteriologically and chemically once a week.

All these are excellent and practical recommendations, which ought not to be beyond the executive power of any hospital committee to enforce. Pure, clean, unadulterated, and uncontaminated milk is a crying need, for infants particularly. The difficulty in obtaining it has led to the adoption of methods of dealing with milk which seriously modify its natural properties. This is clearly realised by the inclusion of the clause prohibiting "pasteurisation." It has become the custom of some dairies to treat milk in this way, in order to prevent it "souring" in hot weather and to destroy deleterious organisms. Much can be said against the process. Although it destroys most of the dangerous organisms, many escape and grow even the more readily, because the harmless lactic acid bacillus is also killed. Further, the "souring" of milk is a valuable danger-signal, for it shows at once that the milk is no longer fresh and suitable for infant feeding. Serious chemical changes may take place in "pasteurised" milk without yielding any evidence to taste or smell. Milk so treated, more-

over, is of much less value than is uncooked milk for infants in either good health or bad.

The same objections hold good in the case of milk heated to a higher temperature, as in sterilisation. This is one reason why we are strongly opposed to the municipal supply of sterilised milk for infant feeding. Although it is well known that infants may be reared successfully on undiluted sterilised milk, such a food has little advantage over some of the many proprietary foods in the market. Municipal bodies would be better advised to devote their energies to the provision of pure, clean milk, to the more careful supervision of the sources of the milk supply, to the sanitation of dairies, and to the methods of delivery. We have reached a stage in which it is justifiable to throw upon the municipality the onus of prohibiting the sale of milk, which does not reach certain chemical and bacteriological standards of quality. Until this is done, the hospitals must take special precautions to secure a supply of good milk.

There is no doubt that milk should invariably be strained and refrigerated at the farm, that it should there be canned and sealed, and that it should be delivered sealed. The structure of the milk-can must not be neglected. As usually made, even though locked and sealed, there is ample opportunity for the admission of dust. Refrigeration at the farm, down to 40° F. if possible, should be supplemented by conveyance in suitable railway vans. Unfortunately the railway companies have not yet seen their way to incur the expense of such vans. We are inclined to suggest that hospitals, when sufficiently close together, should combine. Now that the motor has arrived, it ought not to be difficult to find a satisfactory farm, within comparatively easy reach of London, from which the milk might be delivered by motor twice a day, in suitable receptacles, kept at a properly low temperature. We trust that the various hospital committees will not be content with the passage of mere resolutions, but that they will seriously attempt to put their milk supply on a proper hygienic basis.

ANNOTATIONS.

Wasp Waists Again.

WITH the tight bodice comes the wasp waist. That has been fashion's rule from the beginning, and doubtless will be to the end. But during the last fifteen years influences have arisen, which, quite apart from fashion, will make it difficult for girls to achieve that dubious adjunct to beauty. Bicycling, gymnastics, hockey, have developed our girls so that they could not, even if they would, crush their bodies in the way that their grandmothers did. But, in spite of alarmists, we do not think that wasp waists are at present so numerous as to endanger the health of the bulk of our women. Tight-lacing, to be successful, must be begun when a girl is young, and no one who is familiar with the temper of our school-girls to-day will readily believe that they will prove as wax in the hands of dressmakers, corsetières, or others who want to constrict them in any uncomfortable degree. Good, well-shaped corsets can be bought as cheaply now as bad and uncomfortable ones were a generation ago, and if the lines of gown and corset are good, a waist that bears a decent proportion to its owner's height and breadth may still look slender. There are many slim and graceful women, who, if put to the test, would prove to have quite a reasonable waist. Moreover, it is whispered that in the "sizes" of gloves and shoes the same number does not imply the same measurements as it did in bygone years, and ladies who used to wear $6\frac{1}{2}$ gloves find that to-day a 6 is large enough for a hand that shows no sign of having grown smaller. Something of the same kind may be going on in the corset world, and a conventional 17 may not mean just the 17 inches which its wearer fondly thinks. On the whole, we are not alarmed about the threatened re-introduction of the wasp waist. That there are, as there always have been, simpletons who sacrifice health and comfort to false ideas of beauty, we doubt not, but they are a very small percentage of our womenkind.

Cardiac Disease in Early Life.

AT a recent meeting of the Society for the Study of Disease in Children a number of examples of cardiac disease in young patients that were exhibited led to a discussion in which some interesting points were raised. In one patient, a boy of some 12 years, there was complete dextrocardia, and the facts of the case, and a statement by the mother of some medical observations made on the child in infancy, justified the view that this was a congenital condition, though the evidence showed that the liver and other viscera were not transposed. The special feature of the case, however, was the existence of presystolic and systolic murmurs heard most distinctly over the cardiac impulse situated just outside the right nipple line, and conducted round the right side of the chest. From these facts it was argued that in all probability these murmurs were produced at the mitral valve, which in a case of congenital dextrocardia—that is, of true transposition and not mere displacement of the heart—must be situated at the right auriculo-ventricular orifice.

The presence of murmurs at the right apex and conducted to the right were held to support the view that the case was one of true transposition. Unfortunately, repeated attempts to obtain a skiagram with a view to determine whether the arch of the aorta was on the right or left side had proved unsuccessful. In a second case a little girl with mitral disease awaked one morning to find her left upper limb paralysed, and it was suggested that this was due to embolism affecting the cerebral cortex; some of the speakers rejected this view in favour of the diagnosis of thrombosis. A third patient, in addition to evidences of congenital disease of the aortic valve, had a continuous humming noise immediately to the right of the sternum; the interpretation of this seemed very uncertain, but one speaker suggested that it might be due to some abnormal condition of the veins in the upper thorax.

Medical Titles.

EVERY now and then a discussion, sometimes not unattended with bitterness, breaks out in reference to the correct styles and titles which should be applied to various groups of medical practitioners. Does a certain qualification entitle a man to call himself a physician? Or is another a warrant for the use of the term "Doctor"? These disputes doubtless appeal mostly to minds of a juvenile order, but, as may be seen from recent contributions to some of our contemporaries, there are quite a number of graduates, even of the Metropolitan University, who appear to consider that their chief claim to distinction resides in the fact that they at one time in their lives managed to pass a moderately difficult examination. Whether such success was a decided one or was perilously near the margin of failure is a question not discussed, nor is any reference made to the amount of artificial or special aid which had to be invoked as a necessary preliminary to the examination contest. Now all these questions may well be regarded as trivial by men whose sense of individual values has been informed by experience and who recognise that personal worth has little to do with alphabetical decorations. Yet it is perhaps necessary to allow something for human peculiarities, and it is certain that in the disputes to which reference is here made, personal feeling in an acute form is sometimes engaged. To meet the position it has been suggested that professional recognition shall be extended to the proposal to apply the term "Doctor" to every qualified medical practitioner. This, of course, excites opposition in certain quarters, and as an alternative it is now proposed that all medical practitioners shall be content with the term "Mr." Personally, we think there is much to be said for this view. It has its parallel in the practice of the legal profession, it avoids disputes, and it satisfies the demands of courtesy. Further, it allows a medical practitioner to escape in his periods of relaxation from the atmosphere of his technical work. Why should the medical man not be allowed to take his holiday or to attend a dinner party, free from the announcement of his daily professional activities?

MEDICAL OPINION AND MOVEMENT.

At a meeting on May 2 at the Royal United Service Institute, attended by a large number of medical officers of the Army and Navy, a new society was formed, which we hope may be productive of much good. The society is to be called "The United Services Medical Society," and will consist of medical officers of the navy, British and Indian armies, and the Auxiliary and Colonial forces. The objects of the society, as stated by the Chairman of the meeting, Inspector-General H. M. Ellis, Director-General of the Medical Department of the Navy, are: (1) The furtherance of sciences bearing upon the preservation of the health of the forces; (2) the study of diseases and injuries incidental to the life of sailors and soldiers and the treatment of the same; (3) the study of organisations, methods and apparatus for the amelioration of the condition of the wounded in war; (4) all matters coming within the scope of the technical duties of naval and military medical officers. The meetings will be held monthly in the Royal Army Medical College. The society will be managed by a council, and Inspector-General Ellis was elected President for the ensuing year.

As a result of a careful investigation into the bacteriology of pertussis, Professor Albrecht, of Vienna, has formed the somewhat surprising conclusion that the bacillus pertussis of Eppendorf is identical with the bacillus influenzae. He has found the bacillus pertussis present in 200 cases of fatal pneumonia following whooping-cough in children, and in the sputum of 70 children actually suffering from whooping-cough. He has also isolated the same bacillus from abscesses complicating pertussis and from cases of bronchitis and pneumonia after measles, diphtheria, and influenza. In no case was any difference found between the organisms obtained from usual influenza and from these cases, and he is of opinion that they cannot be distinguished morphologically or biologically. Rabbits immunised with this bacillus showed a high agglutination index. Intravenous injections of broth cultures frequently gave rise to endocarditis of the mitral valves and degeneration of the liver and heart-muscles, and large quantities of the bacillus influenza were obtained from these parts. These facts would explain the severe cardiac complications which so often accompany comparatively mild attacks of influenza. It will be highly interesting to see what light further bacteriological research may throw upon the question of the identity of these two micro-organisms, but in the meantime it is difficult to reconcile our clinical knowledge of the two diseases with a common microbic origin.

THE Liverpool School of Tropical Medicine has not only distinguished itself by the way in which it equips medical men with the necessary knowledge to practise their profession in the tropical parts of the British dominions, but it also forms one of the

centres of keenest activity in carrying out scientific research by organising expeditions to combat disease. The latest expedition has been despatched to Central Africa to study sleeping-sickness, and advise on means by which it can be prevented from spreading to regions not yet infected. Dr. Allan Kinghorn and Mr. R. Eustace Montgomery are taking part in this expedition, and they will visit British East Africa, British Central Africa, Rhodesia, the Portuguese territories, and the Congo Free State. The Cape Government will give them free transport over their lines, and every assistance will be offered them by the Governments and corporate bodies of those parts. A farewell banquet was given to the expedition by Sir Alfred Jones, President of the School, and messages were read from the Earl of Derby, Lord Elgin, and Mr. J. Chamberlain. In the course of his speech Sir Alfred Jones said that they had sent out 22 expeditions from the School at a cost of £80,000. They were now organising another expedition to study black-water fever, and this would leave next August.

AN accurate knowledge of the anatomy of the lymphatic system, of the course of the lymphatic vessels, and of their connections with the gland groups in the different parts of the body, is of the utmost importance to a proper understanding of the spread of microbic infections and of malignant disease. Mr. W. S. Handley has done excellent work in this field by demonstrating the lymphatic connections of the breast with adjacent parts of the body, and he was able in consequence to indicate clearly the lines on which excision of the breast for carcinoma should be carried out in order to secure a thorough removal of the disease. Recently Messrs. J. Kay Jamieson and J. F. Dobson, of the Leeds University, have worked at the anatomy of the lymphatic system in relation to the stomach and the caecum and appendix. In regard to the stomach, they are led to the conclusion that the operation of radical gastrectomy for carcinoma, as designed by Cuneo and carried out by Hartmann, Moynihan, and Mayo, does not ensure complete removal of affected glands even of the "first relay." Unfortunately, these glandular groups are so complex and extensive that a radical operation in the sense originally intended seems altogether beyond the powers of the surgeon, except in cases of a very early diagnosis, before any lymphatic invasion has taken place. Their researches on the lymphatic connections of the caecum also show that the usual operation of excision does not ensure removal of these connections, and they have devised a method of procedure which would accomplish this purpose. Although this operation is more extensive than the one hitherto adopted, the authors consider that it would not involve greater risk to the patient, as the surgeon would be better able to control the blood-supply of the part, and to recognise and avoid important structures which may be wounded and have frequently been wounded in the past.

HOSPITAL CLINICS.

SOME AFFECTIONS OF THE HEART CONCERNED IN SUDDEN DEATH.

By THEODORE FISHER, M.D., M.R.C.P.

IV. THE CARDIAC MUSCLE—(continued).

There are other causes of fibroid disease of the heart besides disease of the first part of the aorta and atheroma of the coronary arteries. Syphilis may give rise to this affection of the heart both through the medium of disease of the arteries and gummata. It has never fallen to my lot to meet with a case where fibrosis of the heart appeared to have followed disease of the coronary arteries of clearly syphilitic nature, but large fibrous patches which with little doubt have been the sequel of the presence of a gumma are not very uncommon. I have seen a very large patch of this character in the heart of a prostitute, who, however, did not die suddenly. Yet not only these large patches, but gummata in their earlier stages may occasion sudden death.

A CASE OF SYPHILITIC DISEASE.

It may be interesting to refer to a case of syphilitic disease of the heart which came under my notice where death, although not absolutely sudden, was of acute onset. On calling one afternoon at a hospital in order to see one of the residents, I was taken to see a case which had recently been admitted. The patient, a finely-built captain of a ship, was said to have had several fits, and one of these fits occurred soon after we entered the ward. He became intensely cyanosed, no pulse could be felt, and no cardiac sounds were audible. There was a deep respiration about every half-minute, sometimes, perhaps, at a shorter, sometimes at a longer interval. The pupils were somewhat contracted. After four or five minutes had elapsed, during which time it looked as if every moment were to be his last, he suddenly became flushed and the heart could be felt beating forcibly. The pulse was then about 80 to the minute and for a time regular. The impulse, however, soon grew feeble and the pulse irregular, the intermittence, however, varying with the respiration, occurred for a time at regular intervals, every fourth beat being absent. After another few minutes had passed the pulse grew regular, but was slow—only 44 to 46 to the minute. During this time the respirations had become natural, but the patient was restless and worked himself into the sitting posture. A little later, about twenty minutes after the onset of the fit, he was semi-conscious. On examination of the heart a loud widely-conducted pulmonary systolic murmur was now audible, and also at the apex the dull diastolic sound, which sometimes has not inaptly been called "the third sound" of the heart. Several similar fits followed during the course of the evening and the man was dead before the morning. At the post-mortem examination a gumma was found in the septum interventriculorum immediately below the aortic valve. It was the size of a large filbert-nut and projected into the cavities of both ventricles. For many years it has

been noticed that lesions of the septum interventriculorum are more likely to occasion serious disturbance of cardiac action and sudden death than areas of disease elsewhere in the cardiac muscle. Apparently, however, only comparatively recently has the possibility of interference with the bundle of His, which passes from the right auricle to the septum between the ventricles in this situation, been thought to be the explanation of these disturbances. The above case is a good illustration of the sensitive character of the upper portion of the septum interventriculorum, and also of the combination of symptoms which are known by the name of Stokes-Adams' disease.

A lesion of the heart-wall was present here, which led to death, not suddenly, but in the course of a few hours. Death, however, may be absolutely sudden. A doctor whom I once met said he was talking to his father, who was preparing to start on his morning's professional round, when he fell dead, and that to all appearance he was dead before he reached the ground. In other cases there may be a short ejaculation indicating a sense of apprehension of evil, or death may be preceded by a sense of faintness. Again, a condition of collapse may exist somewhat resembling the result of an abdominal injury, or there may be distressing attacks of severe cardiac pain. Whether death be absolutely sudden or delayed for a few minutes, or even hours, some variety of fibroid disease of the cardiac muscle will, in the majority of instances, be found after death. There are, however, exceptions to this rule. Occasionally, especially in very old people, the heart will present no obvious lesions. In such cases cessation of cardiac action is probably due to the age of the heart-muscle. It has been unable to withstand some slight strain, or possibly disturbance by some toxin, which at an earlier period of life would have been harmless. But even in middle life it may occasionally happen that the heart may fail, yet nothing abnormal can be detected. On one occasion I was asked to perform a post-mortem examination on a man, aged about 35, who had returned home, saying that he did not feel well, sat down in a chair, and died. Nothing whatever could be found in the heart or elsewhere to account for death. Possibly such cases of cardiac failure are toxic in nature.

Stress has been laid upon the fact that fibroid disease of the heart is the most common cause of sudden death. This is well recognised, but it is perhaps not so well known that in cases of sudden death nothing but a large heart may be found in which disease of the cardiac muscle and of the valves is absent. It is these cases which are most likely to be considered instances of death from mitral regurgitation. To those who are unaware that large hearts of this character may fail suddenly it is easy to commit the error—referred to in a previous article—of mis-

taking normal thickening of the edge of the mitral valve for disease, especially as some text-books speak of mitral regurgitation as a cause of enlargement of the heart.

Occasionally the large heart may be found associated with a red granular kidney, but more commonly the kidneys are healthy. Possibly the most common cause of a large heart, where valvular disease and chronic interstitial nephritis are absent, is alcoholic intemperance. Cases of sudden death are by no means uncommon, where circumstances suggest that this is the most probable cause for the enlargement. For example, a carter, aged between 30 and 40, falls dead off the seat of his wagon while driving. A large heart is found, weighing 16 ounces, but lesions of the valves, disease of the cardiac muscle, and of the kidneys are absent. In such a case as this the occupation of the deceased man suggests that over-indulgence in alcohol was the probable cause of the enlargement. In other cases, when

lesion or fibroid degeneration of the cardiac muscle, although in cases of this nature where sudden death occurs, there are rarely means of ascertaining the part played by alcohol in producing the enlargement of the heart, alcohol is without doubt the most common cause of such enlargement, and in any individual case what cannot be proved may be considered highly probable. There are, however, other causes for the enlargement, one of which is arduous work. Some instances which have come under my notice seem to indicate that it is not laborious exertion merely, but such exertion in a hot atmosphere that is likely to cause the development of these large hearts. At least the best-marked examples I have met with have occurred in two instances in gas stokers, and in a third in a black-



FIG. 4.—THE LARGE HEART OF A GAS STOKER.

The smaller heart is of normal size, and is placed by the side of the larger for comparison. The age of the gas-stoker was 44.

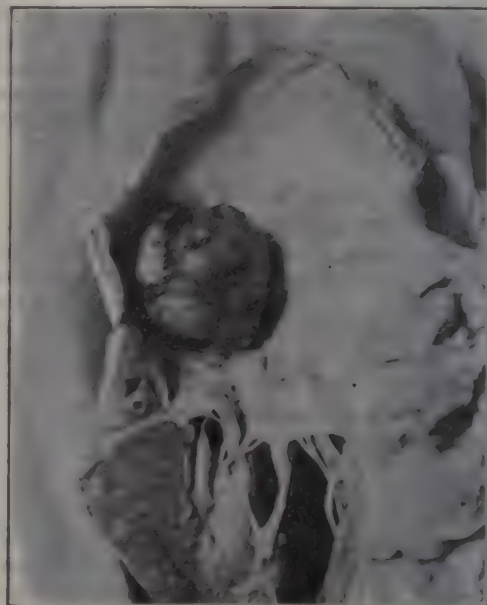


FIG. 5.—BALL-THROMBUS IN THE APPENDIX OF THE RIGHT AURICLE.

death is not absolutely sudden, the condition of the dying man may possibly incorrectly lead the police to think that he is intoxicated. As an illustration a case of a man, aged 30, may be mentioned who was found "drunk" by the police. He died about half an hour later, and at the autopsy examination of his heart showed it to be much enlarged and weighing 18 ounces; but no cause could be found for the enlargement. Here alcohol may have been the cause of the enlargement, but recent heavy drinking was not the reason of rapid failure. In such a case, although the supposed drunken man proved to be dying of cardiac failure, it may be interesting to mention that a weak heart may fail while a man is taking alcohol. For example, a man, aged 64, became collapsed while drinking in a public-house, and died very shortly after. His heart proved to weigh as much as 20 ounces, but in this instance red granular kidneys were present, and the cardiac enlargement was probably not consequent upon alcoholic intemperance.

HARD WORK AS A FACTOR IN ENLARGED HEART.

To return to the cases of enlarged heart in which renal disease is absent and there is no valvular

smith. Fig. 4 is a photograph of the large heart of a gas stoker, and a heart of normal size placed by its side for comparison. The heart of the gas stoker weighed 35½ ounces. In none of these three cases, however, was death very sudden, but in one death took place in about 36 hours from the onset of the symptoms, extreme cyanosis being a marked feature. It may be interesting to mention in this connection that the report of an inquest in a daily paper once attracted my attention, which mentioned that a striker in engineering works, aged 34, had fallen dead while playing cricket, having just hit the ball for five runs. It occurred to me [although, since no post-mortem examination was made, it is needless to say there was no proof of the truth of the idea] that this man might have possessed a heart enlarged as the result of his hard work in the hot atmosphere of the factory.

A rare but remarkable cause of death is rupture of the heart. This cause of death seems to be especially common in insane patients. Mr. Cecil Beadles has recorded several such cases, which

occurred in Colney Hatch Asylum. The cause of the rupture in some instances does not seem to be clear, though in others it appears to be due to local degeneration of the cardiac muscle dependent upon interference with the circulation. Another uncommon cause of sudden death is thrombosis of a coronary artery. Curiously enough, as Dr. Parkes Weber points out in a case which came under his notice, and I believe the same observation had previously been made by Dr. Moxon, there may be evidence in the thrombus that life has continued sufficiently long after the thrombus has formed to allow the clot to become partially organised. I have, however, met with a case where both coronary arteries were thrombosed. It is needless to say that death must have followed the thrombosis quickly in this instance. Still another cause of sudden death may be mentioned, of which Dr. Osler and others have recorded instances; this is, the detachment of a ball-thrombus from the appendix of one of the auricles and its fixation in the corresponding mitral or tricuspid orifice. Although no such accident happened in the case from which fig. 5 is taken, a glance at the illustration will make it clear how easily the circulation could be stopped by the presence of the ball-like clot in the tricuspid orifice which lies below.

ANEURYSM.

One other cause of sudden death may be mentioned, because, although the disease which occasions it is not within the heart, it lies within the boundaries of the pericardium. This cause of death is aneurysm of a sinus of Valsalva. Such an aneurysm produces no symptoms until it bursts, and when it bursts into the pericardium it leads to very rapid death. Occasionally an aneurysm in this situation may burst into the superior vena cava or pulmonary artery, and when this takes place death may not occur for some weeks, or perhaps a longer period, after the accident. In such cases interesting murmurs may be heard during life, but these do not concern us here. As an example of rapid death, the following case may be mentioned. A man, aged 46, awoke at 4 A.M. complaining of pain in the chest. He became collapsed and died at 7.30. At the autopsy an aneurysm the size of a walnut was found in one of the sinuses of Valsalva which had burst in the pericardium, where 15 ounces of blood were present. An illustration has been given of one of these small aneurysms (see

fig. 6). In this case, curiously enough, although absolutely sudden death occurred, bursting of the aneurysm was not the cause. The possible mistakes of others have been mentioned, and I must confess my own. The specimen was removed from one of the first cases of sudden death upon which I made a post-mortem examination. Although aware of the importance of fibroid disease of the heart, I did not then realise the frequency with which disease of the aorta, by causing interference with the circulation



FIG. 6.—ANEURYSM OF A SINUS OF VALSALVA.

The letter A points by a dotted line to the cavity of the aneurysm. The specimen is from a man, a street hawker, aged 38, who died suddenly.

through the coronary arteries, leads to degeneration of the cardiac muscle. The specimen was mounted without extensive cutting into the cardiac muscle. The heart has remained untouched since, but there can be no doubt that the cause of death is to be found in the muscle-wall. While, however, this aneurysm did not rupture, it is a good illustration of yielding of the aorta over a small area immediately above the valve, and from its size it must be clearly realised how such a serious condition may exist without giving rise to symptoms, and the first indication of its existence be rupture ending in rapid death.

DERMATOLOGICAL BREVITIES.

The Temperature in Herpes.

The analogy between herpes zoster and an acute exanthem is sometimes very striking. The temperature is nearly always raised, sometimes to as much as 101° on the first and second days of the appearance of the rash. With this pyrexia there is an accompanying feeling of malaise or even a slight rigor. After the third day, when no more vesicles have erupted, the temperature regains the normal.

The Child's Skin.

THE chief peculiarity about the treatment of skin disease in children is that the reaction to the reme-

dies applied is more prompt than in adults. Moreover, since the risk of absorption is by no means inconsiderable, ointments and lotions containing powerful poisons, such as carbolic acid or mercury, should not be employed, unless well diluted, over large surfaces of the body. Certain cutaneous lesions are also very transient, so that one is left with their results, notably the scratchmark and the scab. The history of the mode of onset of an eruption, as given by an intelligent mother or nurse, is, therefore, of greater value than the statement of the patient himself, who might even be unaware of the existence of anything wrong with his skin.

DERMATOLOGY.

SCALP ECZEMA IN CHILDREN.

CONSIDERING the activity of the sebaceous glands in infancy and the ease with which micro-organisms flourish upon a seborrhœic basis, it is not surprising that eczema of the scalp, so-called, is such a common affection at this period of life. True eczema of the scalp in infants, apart from seborrhœa, is not an everyday occurrence, whereas a seborrhœic dermatitis affecting this region is constantly seen at a large skin clinic or by any busy practitioner. Cases of this sort divide themselves naturally into (a) the dry, scaly, and (b) the moist and crusted forms. The first type is met with as a fine, branny desquamation upon the scalp of quite young infants, especially in those with scanty hair. The disease encroaches upon the integument of the face and neck, and in these latter situations there may be a very little exudation of moisture. The term "pityriasis simplex capitis," sometimes applied to this condition, really describes a symptom only, and is not a true synonym for eczema. In older children the diagnosis from ringworm of the scalp is a matter of great importance, and in many cases it is quite impossible without a microscopical examination of a surface-scraping in potash solution to decide the question. An eczema is generally much more diffuse than tinea tonsurans, and in the latter a careful search with the aid of a lens will be almost sure to reveal the presence of at least one characteristic "stumpy" hair. Nevertheless, the one is frequently mistaken for the other, with sometimes disastrous results. The second, or crusted variety, is easier to diagnose, though some cases of inflammatory ringworm (kerion) simulate, at times, this form of eczema. When all crusts have been removed by appropriate treatment one or two suspicious hairs may then show the true nature of the case. Traumatism and local inoculation are the chief factors in producing a crusty eczema, and there are few conditions which look more formidable than a severe case of *Eczema crustosum* in a young infant.

With regard to the question of treatment, one is pretty sure to be met with the popular theory that the disease must on no account be cured too quickly in case it should "strike inwardly" and cause some internal malady of graver import, if not a fatal issue. There is no doubt that the risk of such results has been somewhat exaggerated, but, like most popular beliefs, this idea has some foundation in fact. In the so-called "eczema death" of infants, described by Feer, the "status lymphaticus" was present, i.e., the lymphatic glands were generally

enlarged throughout the body, as was also the spleen. A few cases have been reported in which signs and symptoms of true nephritis have supervened in the course of an impetiginous eczema of the scalp in children. The recent researches of Bernheim-Karrer have shown that a staphylococcal toxæmia has existed in such cases and has resulted in death from cardiac failure. The sudden suppression or disappearance of a scalp-eczema is not infrequently followed by convulsions, but when the ease with which these nerve-cell-explosions occur in infants is remembered too much significance need not be attached to this symptom. The case of Hahn is worth bearing in mind: an infant, after having had its scalp-eczema treated with an ointment containing litharge, died of convulsions believed to be saturnine, and a minute quantity of lead was recovered from the cerebral convolutions after death. Albuminuria is stated by Guinon and Pater to be not uncommon in these cases, and it is suggested that the fatal result is therefore due to renal insufficiency. Enough evidence is, therefore, forthcoming to inculcate a certain degree of caution in the treatment of eczema in young children.

If once the golden rule be recognised that where two ointments will cure an eruption the weaker is to be chosen, the practitioner will be on the right track. The very weakest of applications compatible with efficiency should always be employed. The oxides and the oleates of zinc and bismuth, five grains of each to the half-ounce of vaseline, with ten minims each of sweet almond and olive oils, make up a non-toxic yet remedial salve which may safely be applied to the scalp of an infant a few weeks old in cases of not too crusty eczema. When a complete mask of crusts presents itself two or three applications of the boracic-starch poultice, containing only ten grains of boric acid to two ounces of starch, will cause its effective removal, or, if this be impracticable, soaking the crusts with warm oiled linen rags is equally good. After the scabs have gone an ointment of zinc oxide, ten grs.; ammoniated mercury, three grs.; lanoline to one ounce, may be applied. No soap should be used, but the affected parts may be bathed with a very weak calamine lotion, or with a mixture of equal parts of cow's milk and warm water in which a little bran has been allowed to soak. The dressings should be lightly tied in place, and, in order to reduce the evil results of rubbing and chafing to a minimum, the child's hands may be muffled up or light cardboard splints may be applied to the arms, fixing the elbows. Strong antiseptics, especially coal-tar derivatives, are best avoided altogether in infantile scalp-eczema. In cases associated with pediculosis or impetigo, and these will generally be in older children, the amount of ammoniated mercury in the ointment may be increased to ten grs. to the ounce.

SPECIAL ARTICLE.

POINTS IN REGARD TO PHTHISIS PULMONALIS.

I. THE PROPORTION OF CASES WITHOUT EXPECTORATION.

THERE is always room for doubt whether abnormal physical signs, present at the apex of a lung, are due to phthisis until the existence of a tuberculous lesion is absolutely proved by the occurrence of tubercle bacilli in the sputum. It occasionally happens that physical signs and symptoms which at first sight appear typical of phthisis, ultimately turn out to be due to something quite different. To give a single example. A patient may present himself complaining of recurrent hæmoptysis; upon examination, impairment of note may be found over the apex of the upper lobe of the right lung, together with crackling rales, bronchophony, and prolongation of the expiratory part of the vesicular murmur; the commonest cause of hæmoptysis and of these physical signs is no doubt phthisis, but occasionally a small thoracic aneurysm may produce exactly the same results by partially obstructing the bronchus going to the upper lobe of the right lung. The diagnosis of phthisis should never be made without confirming it, where possible, by an examination of the sputum for tubercle bacilli.

It at once becomes important to know what proportion of cases of phthisis do not expectorate anything from the lung. Statistics upon this point are bound to vary according to the kind of patients who come under treatment, the length of time they are kept under observation, and so on; but it is remarkable how many patients who have made a comparatively long stay at a sanatorium have had no expectoration throughout their stay there. The following figures are obtained from the annual report for the Mount Vernon Hospital for Consumption at Hampstead; the extent of the lung trouble was gauged by the physical signs, and it was found that of 198 patients who had evidence of infiltration of one lobe only, 35 had no expectoration; of 277 cases with infiltration of more than one lobe, but without any physical signs to indicate cavitation, 25 had no expectoration; and of 203 in whom there were cavities in the lung, 10 had no expectoration. Expressed as percentages we find that of cases with infiltration of one lobe only, 18 per cent. had no expectoration; of cases with infiltration of more than one lobe, but without cavitation, 9 per cent. had no expectoration; of cases with cavitation, 5 per cent. had no expectoration.

It naturally follows that in all such instances one has to be content with diagnosing phthisis from the symptoms and physical signs alone, without obtaining positive proof of the lesion being tuberculous.

Presumably there was sputum really coming from the lung in at least some of these patients; but it was swallowed instead of being expectorated, and the patient could not change the swallowing into expectoration when desired. Acting upon this

assumption, it was thought that traces of sputum might sometimes be found adhering to the larynx, and that such fragments might be recovered by the use of a laryngeal probe. This was tested in a few cases, and although the attempts so far have not been very successful, the investigation seems worthy of a more extended trial. The difficulties are, mainly, that the amount of sputum to be obtained from the larynx is very small, and that it is difficult to remove the probe without contaminating it with the secretions in the pharynx. That the method is feasible was shown by the positive results obtained in cases already known to be positive; but Dr. Roome did not succeed in getting a positive result from any patient who never expectorated.

II. THE PROPORTION OF CASES OF PHTHISIS IN WHICH TUBERCLE BACILLI ARE NOT FOUND IN THE SPUTUM.

There are many reasons why tubercle bacilli may not be present in the sputum of a phthisical patient. We need not enter into all of these here, but we may mention two of the commoner causes. The first depends upon the fact that there is usually some reactionary bronchitis in the non-tuberculous lung tissue immediately round the tuberculous foci: muco-pus coughed up may be the local bronchitic secretion, and therefore free from any actual tuberculous material. It usually happens, of course, that both tuberculous and non-tuberculous muco-pus are expectorated together, but it is quite possible for the simple bronchitic sputum to preponderate so much that, without very special methods of examining the expectoration, no tubercle bacilli are found. It is well known that the sputum in cases of acute miliary tuberculosis of the lungs seldom contains tubercle bacilli, and very possibly the explanation is that just suggested. The second reason is that in many cases of phthisis, particularly those of old date, there is a secondary infection of the bronchioles and cavities by all sorts of other organisms, staphylococci, streptococci, diplococci, and other bacteria of various kinds. Many of the symptoms of phthisical cachexia are due to the toxic effects of these other organisms, and not to the tubercle bacilli at all. The tubercle bacilli have damaged certain areas of the lung and the other organisms infect these areas afterwards, and produce a chronic suppuration with its attendant consequences. The sputum may be abundant, but tubercle bacilli may be difficult to find, and not infrequently they may not be found at all. The Mount Vernon Hospital statistics show that out of 163 patients who had infiltration of one lobe only, and who expectorated, 93 had no tubercle bacilli discovered in their sputum notwithstanding repeated examinations; of 152 patients who had infiltration of more than one lobe without signs of cavitation, and who expectorated, 54 proved negative as regards tubercle bacilli in their sputum;

and not even every patient who had extensive phthisis with obvious cavitation showed tubercle bacilli in the sputum, 11 out of 193 being negative. Expressed as percentages we find that of patients with infiltration of one lobe only and who expectorated, 57 per cent. had no discoverable tubercle bacilli in the sputum; of cases with infiltration of more than one lobe, without obvious cavitation, 22 per cent. had no discoverable tubercle bacilli in the sputum; of cases with cavitation, 5 per cent. had no discoverable tubercle bacilli in the sputum.

Taking the cases all round, independently of the extent of the lesion, the total number of cases was 678, and out of every 100 there were 10 who had no expectoration at all, 24 who had expectoration in which no tubercle bacilli could be found, while in 66 only could tubercle bacilli be detected in the sputum. In other words, all important though it is that tubercle bacilli should be found if a diagnosis of phthisis is to be absolutely certain, we have to be content to know that, even in a special hospital, about one-third of all the cases have to be diagnosed without these bacilli being found.

III. THE ASSOCIATION OF HEART DISEASE WITH PHTHISIS.

It is usually taught that heart disease, other than congenital malformation, and phthisis seldom occur in one and the same patient. This is undoubtedly true in the main. It is probably not because there is any inherent protective influence exerted by such a lesion as mitral stenosis upon the lung, or by phthisis pulmonalis on the heart. It is much more likely that the rheumatic diathesis and the tuberculous diathesis seldom occur simultaneously in the same patient. There can be little doubt that some persons are born predisposed to phthisis; there is almost as little doubt that other persons are born with a special tendency to suffer from acute rheumatism. It is very difficult to give any explanation of these hereditary tendencies or "diatheses," but that they are of great significance we cannot doubt. It is not that the person with the rheumatic diathesis cannot develop phthisis, it is merely that he is not very likely to do so. It is not surprising, therefore, to find that heart disease and phthisis pulmonalis do sometimes occur in the same patient. The extent of this liability is shown by a series of 727 consecutive consumptive patients, of whom 20, or rather less than 3 per cent., had heart disease as well.

IV. THE OTHER TUBERCULOUS LESIONS WHICH PHTHISICAL PATIENTS MAY SUFFER FROM.

It is distinctly rare for phthisical patients to suffer from tubercle elsewhere than in the *lung* and *pleura*, except in those parts to which the tuberculous sputum may be directly carried, namely the *larynx*, the *intestine*, and much more rarely the *buccal cavity*. The patient may develop miliary tuberculosis of the lung; but for him to develop general miliary tuberculosis all over the body is a pathological rarity. Tuberculous meningitis, for example, is very rare in connection with phthisis pulmonalis.

Dr. Nathan Raw goes so far as to say that there are two forms of tuberculosis in man, the *human* type and the *bovine* type. The human type, due to bacilli from another human being, leads, he says, to tuberculous lung, pleura, larynx, and bowel; whereas he holds that other tuberculous lesions, such as lupus, caseous lymphatic glands, arthritis, spinal caries, and so on, up to general tuberculosis, are due to bacilli that have come from a bovine origin. This may very possibly be true in the main; but in a certain number of cases of phthisis tuberculous lesions occur elsewhere than in the lungs, pleura, larynx and intestine. Thus, out of a series of 727 consecutive cases of phthisis in the Mount Vernon Hospital, there were:—

Four cases with spinal caries.
Two cases with tuberculous kidney.
Two cases with tuberculous ulceration of the bladder.
One case with lupus.
One case with tuberculous dactylitis.
One case with tuberculous arthritis.
One case with tuberculous abscess in the arm; and
One case with acute miliary tuberculosis.

These would doubtless be explained by Dr. Nathan Raw as cases of phthisis in which abundant milk diet had led to an infection with bovine tubercle in addition to the existing human infection. Very possibly this is so. In any case, the proportion of cases with what we may call extra-lesions is small, and really helps to support Dr. Nathan Raw's contention. The only tuberculous lesions that are at all common in consumptive patients, besides those in the lungs, are tuberculous laryngitis and tuberculous ulceration of the bowel. Symptoms of the latter are usually conspicuous by their absence, and it may be worth noting, in conclusion, that it is almost unknown in the post-mortem room not to find tuberculous ulcers in the bowel in all patients who have had tuberculous laryngitis during life.

NEW APPLIANCES AND THINGS MEDICAL.

CALOX DENTIFRICE.

(McKEESON AND ROBBINS, NEW YORK. BRITISH AGENT: A. C. WOOTTON, 14 TRINITY SQUARE, LONDON, E.C.)

THIS is an amorphous white powder; it contains an appreciable percentage of calcium dioxide, from which hydrogen peroxide is easily liberated. Used on a soft brush with ordinary lukewarm water, nascent H_2O_2 , one of the most powerful deodorants and antiseptics we possess, is produced. Its use should keep the teeth white and prevent decomposition in the oral cavity. The powder, which is put up in specially made tins, possesses a slight but pleasant aromatic odour, and we have found in it no ingredient which is likely to harm the teeth or mucous membrane.

WRIGHT'S COAL-TAR INHALER AND VAPORISER.

THIS is a simple block-tin vaporiser, fitted with an absorbent block, which is heated by a night-light. By means of it not only the coal-tar preparations supplied, but creosote, formaldehyde, and other volatile antiseptics and deodorants may be vaporised. It is cheap, portable, and light, and its simplicity is such that anyone can use it. In cases where vapour treatment is indicated it should prove of great service. The makers are Messrs. Wright, Layman and Umney, Limited, 48 Southwark Street, London, S.E.

POINTS IN SURGERY.

BURNS: Their Immediate Local Treatment.

IN cases of burns death may be due first to asphyxia, secondly to shock, and thirdly to septicaemia. The medical man seldom gets to the case in time to treat the first condition; the second is essentially a general condition; while the whole success in preventing the third depends upon the immediate local treatment. It is, therefore, the condition which must be considered here.

A MISTAKEN IDEA.

Among the public it is a generally accepted idea that the thing to do in the case of a burn is to dust flour over it or to cover it with oil, and, indeed, even in some comparatively late text-books on surgery, a mixture known as "Carron Oil" is advocated. The use of such applications cannot be too strongly deprecated, and, indeed, if the lay mind could be taught that the best thing to put on a burn before the doctor is called is a hot compress which should contain some boracic acid if there is any in the house, it is probable that the majority of deaths due to septicaemia after burns would be prevented. For the whole aim and object of the local treatment is to prevent sepsis; flour and olive oil may be very soothing and may allay the pain, but there is no antiseptic property in them; rather they are excellent culture media for bacteria.

TO PREVENT SEPSIS.

To repeat then—and the fact cannot be too strongly emphasised—the local treatment of burns is essentially to prevent sepsis; this is to be obtained in two ways, firstly by removing anything from the burnt area which may in any way favour sepsis, and secondly by applying some antiseptic dressing.

The form of burn most commonly seen may be taken as an example, namely, one of the second and first degree, where there is a bleb containing clear fluid, and around this a reddened area of skin; and here it must be clearly understood that no burn, however small, is too insignificant to need the most careful attention; when once it has been allowed to go septic, a burnt area the size of the palm of the hand is large enough to generate toxins sufficient to cause death by absorption. In the first cleaning up of the burn the amount of shock accompanying it must be carefully considered. The question to be decided is, how much active treatment may be safely employed without increasing the shock to a degree dangerous to life? What must be aimed at is the aseptic removal of all the loose-lying epidermis and of the fluids beneath. The mere pricking of the blebs should not be considered enough; when this only is done a considerable amount of debris is left beneath, and in this bacteria may readily flourish and may subsequently give rise to sapraemia and septicaemia.

CLEANING UP A BURN.

If the shock be not too great, to scrub the burn under an anaesthetic is undoubtedly an excellent measure; by this means the whole burnt area can be efficiently cleaned and dressed in a very short space

of time. Any mild antiseptic lotion may be used, as warm boracic lotion, perchloride of mercury 1 in 3,000, or carbolic 1 in 200, but certainly the best in this case is warm weak lysol [.25 per cent.]; this is antiseptic, it is not irritating in the above strength, and the alkali in it combines with the fat on the surface of the skin and enables this to be easily removed; it can be applied lightly with a sterilised scrubbing-brush, or with a piece of boiled lint rolled up into a ball. If, however, an anaesthetic is not considered safe, if there are no facilities for giving it, or if the burn be very small, much can be done by removing the epithelium with sterilised forceps and scissors. This process does not hurt the patient if the epithelium be gently picked up and care be taken not to pull on the line of junction between the raised-up epithelium and that which remains attached; the area then may be gently washed over with the lysol lotion. At the same time that the burnt area is cleaned it is advisable to clean the skin around; the hands or feet are particularly liable to be dirty and, if near the burn, to be a source of danger at later dressings.

DRESSING A BURN.

When the cleaning has been done the choice of dressing is a large one. That which is easiest obtained and most generally applicable in the early stages is a hot boracic fomentation, which may be changed every four or six hours. Indeed, in many cases these fomentations are also the best, if there is any chance that the first cleaning is not as thorough as might be desired. This is true, for instance, when the shock is so great that it is not thought wise to expose the patient to a long dressing, or when the burn is near the genitalia, the anus or the mouth, whence it may become infected. On the other hand, if the first cleaning has been thorough and there is no particular factor predisposing to sepsis, a dry dressing is better, for it need not be changed so often and, therefore, the patient need not be so much disturbed. The eucalyptus ointment (B.P.) spread on lint is, perhaps, the best application; it is, however, rather expensive and some people object to the smell. A dressing composed of boric acid gr. xx. mixed in 3j. of soft paraffin is good, but is hardly antiseptic enough, even for a well-cleaned burn. Picric acid solution (.5 per cent.) may be used, but it has no especial advantage, and its staining properties make it a very difficult dressing to put on without doing damage to sheets and clothes. A very good dressing is a powder consisting of salicylic acid 1 part and boracic acid 5 parts, powdered on and covered by a piece of dry lint; but it is apt to stick and it makes the redressing very painful; also it smarts for some time after it is applied.

In conclusion, the necessity of dressing the burn at once cannot be too strongly insisted on; if the treatment above described be carried out at once septicaemia should not be anticipated even in a very dirty limb, but if the burn be left for 24 hours such an issue is much to be feared.

EPITHELIOMA OF THE TONGUE.

THERE are few situations where a cancer is better placed for removal than in the tongue. There is not an organ of the body so frequently submitted to medical inspection, nor one the affections of which are manifest more early to the owner. And yet, despite these advantages, lingual cancer is commonly fatal.

It needs no deep philosophy to find the causes of this relative failure of treatment. The fault often lies with the patient. Through ignorance, or fear lest his suspicions be correct, an individual with an ulcer or wart on his tongue is apt to abstain from getting medical advice until compelled to do so by the progress of the disease. So, by the time the surgeon is called upon for help, it is too late. Sometimes, it is melancholy to reflect, the doctor and not the patient is responsible for this fatal delay. The writer has seen a patient with an unmistakable and advanced epithelioma of the tongue which another practitioner had been treating for more than two months with a mouth-wash.

PREDISPOSING CAUSES.

The herald of lingual cancer is superficial glossitis. And superficial glossitis is chiefly brought about by syphilis and excessive smoking. So frequent are these relations that cancer of the tongue has been described as a disease of syphilitic smokers. Professor Fournier found that among 184 cases of cancer of the mouth seen in his private practice, 155 had decided syphilitic antecedents; and Professor Poirier states that, of 32 patients operated upon by him for cancer of the tongue, 27 were syphilitic. The leading part played by smoking in the production of lingual epithelioma is too well known to need any statistical references.

Thus, an individual who has had syphilis and who smokes intemperately may be regarded as a likely subject for the development of epithelioma of the tongue; and if his tongue is very tender and sensitive with superficial glossitis he is a still more likely subject. In the presence of definite well-marked leucoplakia it may be anticipated, as Mr. Butlin has shown, that cancer will develop sooner or later in the whitened area. If there be a warty growth, or an ulcer which does not speedily heal, or a raised plaque in an area of leucoplakia, the patient may be considered to have an actual cancer in the early stage, and, of course, to require the immediate aid of surgery.

TREATMENT.

In considering the treatment of cancer of the tongue it is necessary to mention the method of dealing with superficial glossitis. For there is reason to hope that, by curing superficial glossitis and preventing its return, a great deal may be done to postpone the development of cancer or to prevent its occurrence altogether. To achieve this purpose, all causes contributing to produce and sustain inflammation of the lingual mucosa must be eliminated. Smoking especially is to be interdicted. Irritating articles of diet, such as pepper, curry-powder, mustard, should be avoided; and so are undiluted spirits, as well as very hot beverages and

articles of food. The teeth will require attention, for there must not be any irritation of the tongue by jagged natural teeth or ill-adapted false ones. If a small wart or chronic ulcer be present it should be excised and submitted to microscopical examination.

When well-marked leucoplakia exists, it is more difficult to decide upon the line of treatment. Probably the best course is the strictest observance of those measures which are designed to prevent glossitis, and a careful watch for any early signs of epithelioma, such as an ulcer, a papilloma, or a raised plaque. When one of these lesions occurs, the only wise course is to excise the tongue.

It is not within the scope of this article to discuss the technique of the operation, save to remark that removal of the lymphatics in the submental and submaxillary regions is a usual accessory to the primary operation; an interval of between a fortnight or three weeks is often allowed to pass between the two operations, or the whole procedure can be carried out at a single sitting.

PROGNOSIS.

There are three questions which a patient may be expected to ask, when advised to have his tongue removed for cancer. They are as follows:—Is the operation a dangerous one? Will it cure me? Shall I be able to speak afterwards? Unless the growth be extensive the mortality of the operation for its removal is inconsiderable, the chief cause of death being pneumonia. Shock and secondary hæmorrhage account for a few deaths. But, in careful hands and in cases which are not far advanced, there is little fear that the patient will die of the operation. In neglected cases with wide diffusion of the morbid process, the immediate dangers of operative interference are increased.

As to the likelihood of recurrence, an estimate of this can be formed only from the circumstances of each individual case. With a small and early growth near the tip of the tongue, unaccompanied by any palpable enlargement of the cervical lymphatic glands, a cure may be expected. On the other hand, if the cancer be of old standing and of wide extension, or if there be distinct enlargement of the lymphatic glands below the jaw, the prognosis will be unfavourable. But even if an operation fails to cure the patient, it may afford him great relief from suffering. For if recurrence takes place, it may appear in the neck only and not in the mouth; in which case the suffering will be much less.

In regard to a patient's powers of speech, a consideration of the nature and extent of the required operation is necessary; for the result will rest largely on the position of the growth, its duration and size. If a fairly good stump can be left, and the floor of the mouth remains mobile, the patient is nearly sure to retain the power of speaking intelligibly. He will not have normal speech; for example, he will be unable to roll an "r," but he will not be dumb. For the tongue is not the only organ involved in speech-production, notwithstanding the common superstition that removal of the tongue will make a man dumb.

NOSE AND THROAT.

NASAL DISCHARGE IN CHILDREN.

ONE of the commonest and most important complaints of childhood is the presence of a nasal discharge. This should never be neglected, as it always means that, if unrelieved, there will be obstruction to nasal respiration, and connotes the possibility that the inflammatory process may extend backwards into the naso-pharynx and thence along the Eustachian tubes to the tympanum. A large proportion of the cases of middle-ear disease in children are the direct result of a neglected chronic rhinitis. A nasal discharge may be due to a variety of causes, and for its successful treatment the cause must first be sought. To investigate such a case we must ascertain whether the trouble is acute or chronic, and whether the discharge is continuous or intermittent. Next it is necessary to notice the character of the discharge, whether mucoid, muco-purulent, or purulent, and inquiries should be made as to whether it is ever blood-stained. The presence of any soreness or excoriation of the nostril or lip should also be noted.

Acute catarrhal rhinitis gives rise to a discharge mucoid or muco-purulent in character, and though this may be only that of an ordinary cold, yet it will be remembered that it may signify the onset of measles or influenza. More important is acute purulent rhinitis, which usually occurs in infants shortly after birth, and is caused by infection of the nasal mucous membrane by gonorrhœal or leucorrhœal discharge. This is a serious trouble, for the discharge of pus is associated with swelling of the mucous membrane, leading to so much nasal obstruction that the child may be unable to take the breast and so require spoon feeding. This disease must be distinguished from the early nasal discharge which occurs in congenital syphilis. The latter occurs later, is less acute, and the discharge is muco-purulent in character. Gonorrhœal rhinitis should be treated by gently irrigating the nose with warm boracic lotion, and afterwards painting the nasal mucous membrane with a 1 per cent. solution of protargol. Purulent rhinitis may also occur in measles and in certain other infectious diseases. In the more chronic forms of rhinitis the discharge may be unilateral or bilateral. When unilateral, and especially when the discharge is muco-purulent, occasionally blood-stained, and excoriates the lip, a foreign body should be suspected. This may often be detected by anterior rhinoscopy, or if the discharge prevents a satisfactory view of the nasal fossa, may be felt by a probe. A foreign body is best removed by passing a director along the floor of the nose well behind it. That part of the director outside the nose is then depressed, and the director is drawn out in this position. The foreign body is thus hooked forwards and appears at the nostril. The removal of a foreign body should never be attempted by syringing, as this is very likely to

force septic material along the Eustachian tube into the middle ear.

Nasal diphtheria is an occasional cause of a unilateral nasal discharge. This disease may occur in several forms. Thus it may be secondary to ordinary faucial diphtheria by direct extension. It is then a very serious complication, though the diagnosis will present no difficulties. Diphtheria may, however, be primary in the nose, and when this is so it is usually chronic and causes but little constitutional disturbance. The discharge is mucoid, or muco-purulent, is frequently blood-stained, and causes soreness and excoriation of the upper lip. A definite membrane may be present, though in a large number of cases it is absent. Both nasal fossæ may be affected, or the discharge may be much more profuse from one nostril. Not infrequently it is found that the child has lately had scarlet fever, and that the discharge appeared during convalescence. When a child previously healthy has for some weeks suffered from a nasal discharge with the characters described above, for which no obvious cause can be found, a cultivation should always be taken. These cases show the typical Klebs Loeffler bacillus, though its virulence is comparatively slight, as is shown by the trivial constitutional disturbance and the fact that in the post-scarlatinal variety it seldom gives rise to faucial diphtheria. The following is a good example of unilateral nasal diphtheria. A few weeks ago a child, aged 4, was brought to the throat out-patient department at Guy's Hospital suffering from a muco-purulent nasal discharge of some weeks' duration. A foreign body was suspected, but on examination with a probe a large piece of typical membrane was brought away. A cultivation showed typical diphtheria bacilli, and the child was removed to a fever hospital. In treating these cases gentle irrigation of the nasal fossæ with lot. pot. permang. (gr. ij. ad 3j.) or dilute hydrarg. perchlorid. lotion (1-5,000) should be used as well as the injection of antitoxin.

Suppuration in the maxillary antrum, a common cause of a unilateral purulent discharge in adults, is rare in children, though it has been recorded even in infants. The discharge in these cases consists of foul yellow pus. The methods of diagnosis and treatment are the same as in adults. A discharge of pus from one or both nostrils also occurs with an abscess of the nasal septum, usually the result of injury.

An extremely important cause of chronic rhinitis is the presence of adenoids in the naso-pharynx. The discharge may be continuous or it may vary from time to time. The history given is frequently that the child is extremely liable to colds, which it has a great difficulty in shaking off. The discharge is usually clear and mucoid, though it may be muco-purulent and blood-stained; it is commonly bilateral, and sometimes one nasal fossa is affected far more than the other. Before a uni-

lateral muco-purulent blood-stained discharge is ascribed to adenoids, the presence of a foreign body and of nasal diphtheria must both be excluded. Last autumn a child was sent to the throat department at Guy's for removal of adenoids and enlarged tonsils. These were certainly present, but it also had a typical unilateral blood-stained discharge. Examination with a director revealed the presence of a roll of paper in the nasal fossa, which, from its appearance, must have been there many weeks.

A chronic rhinitis associated with the presence of adenoids, even of a small mass, is a strong indication for removal of these growths; for the inflammatory process is very likely to extend back into the nasopharynx and cause a suppurative otitis media. Removal of the adenoids, followed by systematic breathing exercises, usually soon cures the rhinitis. Chronic rhinitis may also occur as a sequela of certain infectious diseases, such as measles, scarlet fever, and influenza, especially when the child is not well looked after during convalescence. As the result of a long continued rhinitis the mucous membrane becomes thickened and hypertrophied, especially over the inferior turbinated bones; much thick mucus is secreted, and considerable nasal obstruction results. This condition is known as hypertrophic rhinitis, and though in children removal of the original cause of the trouble, combined with tonics and local treatment, will often effect a cure, yet in older children it may be necessary also to treat directly the enlarged turbinates, either by the galvano-cautery or by partial removal.

Atrophic rhinitis usually commences about the time of puberty, but may occur much

earlier. It is characterised by atrophy of the nasal mucous membrane associated with the presence of greenish inspissated crusts, and of an extremely foul discharge from the nostrils. Its relation to the other forms of rhinitis is doubtful, though it certainly sometimes follows a simple chronic rhinitis. Congenital syphilis is an extremely important cause of chronic nasal discharge. It may occur in two forms: (1) "Snuffles," which occurs in infants a few weeks old, and is due to a catarrhal inflammation of the mucous membrane without ulceration, and without necrosis of cartilage or bone. The onset is gradual, the mucous membrane is much swollen, and the mucoid discharge is irritating, and causes fissures and ulceration of the nostril. Owing to the obstruction the child may not be able to suck, rendering spoon feeding necessary until the disease has been controlled by the administration of small doses of hydrarg. c. cret. (2) Gummatus affections of the nasal fossæ, which occur usually between the ages of five and fifteen. The gummata break down and lead to extensive ulceration and necrosis, especially of the septum and of the turbinated bones. There is a profuse discharge of very foul pus, and owing to the necrosis considerable deformity may result. There is usually no difficulty in diagnosis, though this condition may occasionally be confused with atrophic rhinitis, but it must be remembered that no ulceration occurs in the latter disease. The treatment consists in the internal administration of mercury and potassium iodide; locally, the nose should be douched with alkaline and antiseptic lotions, and whenever a sequestrum becomes loose it should be gently removed.

THERAPEUTICS.

THE SERUM TREATMENT OF CEREBRO-SPINAL FEVER.

FOLLOWING the publication last year by Professor Ruppel of his researches upon the meningococcus (*diplococcus* of Weichselbaum) and his experimental work on animals on the subject of immunisation, a serum has at length been prepared which gives promise of proving effective in the human subject. Ruppel's careful work leaves no doubt that by the subcutaneous injection of his serum into animals (particularly rabbits and porpoises) the animals are rendered immune to subsequent inoculation with the meningococcus or recover from the effects of its previous inoculation; so that in animals, at least, the serum appears to act as reliably as the diphtheria antitoxin.

The potency of the serum appears very great; 0.01 c.c. proved protective against 100 to 1,000 times the fatal dose of meningococcus in porpoises, and 2.5 c.c. counteracted the effect if injected after these inoculations of the culture had been made.

Very few data exist as to the practical results in man, for cerebro-spinal fever fortunately is not

always at hand; but from trial in a few instances Professor Ruppel suggests that 25 c.c. will suffice for the curative dose and 5 c.c. for the protective dose.

Subcutaneous injection is the mode of application. One is specially warned that intra-spinal or cerebral injection is most dangerous. When injected under the skin no ill effects are observed.

Meister, Lucius and Brünning have arranged to supply the serum in a desiccated preparation (it is better kept thus) in phials containing 2.5 mg. and 0.5 mg. respectively—the curative and protective dose. For use 25 c.c. of cold, sterilised water are added to the phial containing the larger dose, and 5 c.c. of cold, sterilised water to the smaller. The phials are constructed to take these quantities, and so allow of the mixing without fear of touching any unsterilised vessels. The injection should be made precisely as in the case of anti-diphtheritic serum.

Although the method is a new and tentative suggestion, yet the disease is so fatal in its results, that no undue rashness is involved in giving the serum a trial during our present widespread epidemic.

THE TREATMENT OF INSANITY.

Existing Defects and their Remedy.

VI. SCIENTIFIC METHODS IMPOSSIBLE UNDER ASYLUM SYSTEM.

FROM what has been said it will appear that no sensible improvement in the treatment of insanity is to be expected from the public asylums of this country. Scientific investigation is outside of their province; they have neither the will, nor the means, nor the men to devote to it. With the registered hospitals the case is otherwise. These are in their foundations much on a par with the charitable general hospitals. They are endowed; they are supported to some extent by voluntary subscriptions, and as they make large profits from the payments of the patients, they have very considerable sums at their command which they must sometimes find it difficult to spend. Some of this money goes, as we have seen, to extending the size and increasing the luxury of the institution; some of it goes in relief of the fees of poor patients; some of it goes in increased salaries and a larger number of officials; and some of it is spent in a manner which shows clearly how difficult it is to find objects for the expenditure. Costly chapels, theatres, concert-halls, laundries, and other buildings absorb many tens of thousands of pounds. Antique furniture of choice and costly description and other unnecessary luxuries indicate the difficulty that is felt in disposing of these funds. If a portion of the money thus injudiciously lavished had been spent on the provision of laboratories; if the additions to the staff had taken the form of skilled and zealous workers at research, the reproach of alienism might long ago have been removed, and there would have been no need for these articles. The Royal Hospital of Bethlem is in an eminently favourable situation for such an equipment. It receives none but recent and presumably curable cases, the very cases to which treatment can be most favourably applied. It is in the middle of the greatest city of the world, surrounded by many medical schools, great and small, from amongst which it might have the pick of the best men, all eager to find a field of discovery, hitherto uncultivated, to which they can devote their energies. It is not, it is true, one of the wealthy hospitals for the insane, but if the will and the enterprise had been there, it might occupy its natural position, of the foremost school of alienism in the world. One would have supposed that if it had not the funds, and it is difficult to believe that the funds could not have been found, to form an equipment of its own, it might have made an arrangement with one of the general hospitals to get the work done. But it has done nothing, and it is no longer to be expected that it will do anything.

It appears that it is hopeless to expect this great task to be taken up by any of the existing institutions. For one reason or another they are unfitted or unwilling to undertake it. The efforts that have been made have been so far but tentative and partial. Buildings have been provided, but have not been put to the use that was intended; laboratories have been equipped, but have not been supported

by adequate clinical study. Something more must be done, and must be done in a new way and by new men. The "hospital treatment" of the insane meets with a certain amount of ridicule from experienced alienists; and if, as some of both supporters and opponents of the plan seem to infer, "hospital treatment" means keeping patients in bed and recording their physical signs, the ridicule is justified. Alienists of much experience and high character meet the demand in some such terms as these: "You say we do not treat our patients; and it is true that we do not apply poultices to their heads or blisters to their feet; we do not continually dose them with the last new coal-tar derivative; we see no prospect of benefit from the Röntgen rays or the Finsen light; but we attend to the general health; we build up the nutrition; we treat any bodily disease there may be; we are careful to procure them sufficient sleep; we place them in circumstances in which they are protected from the stress and worry and responsibility of ordinary life; and what more can we do? We cannot give a melancholy person two tablespoonfuls of happiness three times a day out of a bottle. What do you suggest that we can do more? What would you, with your hospital and your laboratories and your army of clinical observers, do that we do not do now?"

The answer is: That is what we have to find out. We have to discover what it is that is causing the insanity in a given case, and then set ourselves to counteract that cause. It is certain, for instance, that some cases of insanity are produced by the action of poisons circulating in the blood. We can actually produce insanity by administering a poison; we can vary the depth of the insanity by varying the amount and the rate of the administration of the poison; and we can cure the insanity by withdrawing the poison. Everyone who has observed a case of drunkenness is witness to the truth of this statement. But acute insanity more or less resembling drunkenness is a very frequent form of insanity. It is one of the most frequent forms of the recurring forms of insanity. Is it not likely, then, that in very many cases acute insanity is due to the action of some poison or other, it may be the same in some or many cases? And is it not fair to suppose that with sufficient means at our disposal we might be able to discover the nature and origin of this poison in at least some cases, and to find the means of neutralising it? How many cases that end in utter mental wreck—or in what is almost worse, permanent distressing delusion—might not be cut short in an early stage, and restored to complete sanity before any permanent damage to the brain has been done? If it would save even a minority of those who slide every year from acute into permanent insanity from becoming for the rest of their lives burdens on the community, and retain them in the wealth-producing class, would it not pay?

We have put but one case, the case of acute in-

sanity due to poison; but there are others. There is the fell disease, general paralysis of the insane. Owing to the splendid work of Dr. Mott in the London County Laboratory, we now know that syphilis is a main factor, if indeed it is not the main factor, in the production of this disease. That it is due to the action of a poison in some way derived from the syphilitic virus there is now no doubt, but the knowledge that we have gained serves to show more clearly the vast extent of the know-

ledge that we lack. How is the poison derived from the syphilitic virus? What relation does the one bear to the other? In what direction are we to look for an antidote? For an antidote there certainly is, waiting to be discovered. Of sufferers from this disease 1,330 are admitted to the asylums of England every year. Remember that when a remedy for general paralysis is discovered, at the same moment is discovered a remedy for tabes. Is it not worth while to try?

TROPICAL DISEASES.

"MALTA FEVER."

MALTA, Mediterranean, or undulant fever is a disease little seen by the ordinary practitioner in England, but though this is so it is an illness which has taken heavy toll of the naval and military men stationed from time to time in the Mediterranean, and has therefore cost the Government thousands of pounds in dealing with its effects. The first definite mention of the disease was made by medical officers of the two services in the early part of last century, but it was then more or less confused with remittent malaria, enteric fever, and other diseases, and nothing certain was known about its cause. In 1887, however, Colonel Bruce discovered the specific germ, a small micrococcus, and this discovery, coupled with his and Hughes' accurate accounts of the condition clinically, at once placed the literature of the disease on a firm basis. Later, when Widal's reaction for enteric fever became known, it was found that Malta fever also gave its own specific reaction; and this fact therefore rendered it easy to further differentiate those two conditions from each other. From 1887 onwards little more was done in trying to determine how this coccus gained entrance into man, or where it lived in nature, and the prevalence of the disease as far as Malta was concerned went on unabated. So severe were its ravages amongst the Services that at last the Government at home took definite action, and a Commission, appointed by the Admiralty, the War Office, and the Civil Government of Malta, under the supervision of an Advisory Committee of the Royal Society, was sent out to Malta to thoroughly investigate the disease. This Commission had the good fortune to have the services of Colonel Bruce, the Chairman of the Sub-Committee of the Royal Society, at their disposal, and work was definitely commenced in June 1904. For a considerable time ordinary routine work went on, a large mass of important material being collected, when suddenly a chance observation supplied the key to the mystery, and solved the riddle of how man becomes infected with the micrococcus melitensis. Some goats were being tested preparatory to being used for inoculation purposes one day, and it was then found that their blood-serum strongly clumped the specific germ—an observation which at once indicated that those animals were already infected with Malta fever; and so it proved, and not only so, but

also that they excreted the cocci in enormous numbers in their milk. Feeding experiments on monkeys and other work soon proved the truth of this contention; and on the adoption of prophylactic measures an immediate fall in the number of cases at once became apparent. The most striking instance of this is related by Staff-Surgeon Clayton, one of the investigators. The Naval Hospital at Malta has always had a very bad reputation, fully one-third of the cases of Mediterranean fever among the seamen of the fleet at Malta being directly traceable to a residence in that institution. As soon as the discovery of the part the goat plays in the spread of the disease became known, the animals supplying the hospital were at once examined, and 10 per cent. of them were found to have the germs of the disease in their milk. The supply was at once stopped absolutely, and since that date not a single case of Malta fever has been traced to a residence there. This to anyone knowing the Naval Hospital at Malta is an extraordinary fact, and equally good results have been obtained in the military barracks throughout the island. Theoretically, therefore, if one could stamp out all the infected goats in Malta the disease would come to an end as far as that island is concerned; but practically there will be a considerable difficulty in doing this, chiefly owing to the opposition of the uneducated and often violently prejudiced natives of the agricultural class. It is computed that there are 20,000 goats in Malta supplying milk for the native and foreign community, and of those 2,000 or more are said to be infected. Two courses have been suggested by the Commissioners: to attempt, firstly, palliation of the disease; or, secondly, its complete eradication. The latter would seem to be the better of the two, but, as just stated, it will be difficult, and require very delicate handling by the civil authorities. Still, it would be a very great misfortune if such a brilliant discovery were to be made no use of, and it is to be sincerely hoped that the Home Government, the Admiralty, and the War Office will combine with the Civil Government of Malta in an attempt to utilise the facts, obtained after years of toil, for the amelioration, if nothing else, of the enormous amount of sickness that has so far prevailed amongst our men in Malta.

RESIDENT MEDICAL OFFICERS' DEPARTMENT.

THE CARE OF THE HANDS.

WE published recently in this section of THE HOSPITAL a short article on the health of resident medical officers. A few practical suggestions were made on the subjects of food, fresh air, exercise, sleep, and recreation. The article did not profess to do more than indicate the main points which a house surgeon should keep before him in the care of his own health. This subject is, however, of such importance, and is so frequently neglected by resident medical officers and ignored by hospital house committees, that we propose to refer to it again from time to time, as opportunities present themselves.

This week we have chosen the subject of the care of the house surgeon's hands. To the non-medical ear this may sound at first like an absurd refinement, bordering on the luxurious and the æsthetic. But to those engaged in the practice of surgery, or in the making of vaginal or post-mortem examinations, it is a matter of the first importance, affecting not only health, but often also life itself.

Septic fingers (or whitlows) and septic throats (or hospital sore throats) are the scourges of hospital life. House surgeons, nurses, and dressers are constantly being incapacitated by them. With sore throats, their nature, prevention, and treatment, we do not propose to concern ourselves at present, beyond pointing out that, although they are accompanied with great misery and prostration, they seldom involve danger to life or even leave permanent after-effects.

Septic fingers, on the other hand, however trivial they may appear at first, are always full of the most dangerous possibilities. Mutilations, deformities, and disfigurements, to say nothing of fatal septicæmias, are frequent consequences of what seem in the beginning to be but mild infections of the nail-bed or finger-pulp. Constitutions weakened by hospital work offer feeble resistance to septic infections, and poisoned fingers which would heal up in a few days in the country, usually linger on for weeks in hospital. Even if they do not lead to cellulitis or involvement of the tendon sheaths, or to septicæmia, they interfere with the medical officer's work, and in spite of every precaution may give rise to infection of his patients' operation-wounds. A whitlow is a septic focus—a continual menace to the house surgeon himself, and to every patient under his care.

What we wish to point out is that septic fingers are avoidable evils, and that their prophylaxis can be summed up in a phrase—care of the hands. Regular and systematic attention to his hands, and especially to the skin around the nails, is quite possible to the busiest of house surgeons.

The constant scrubbing of the hands and nails with stiff nail-brushes, and the free use of irritating antiseptics, which form the routine method of skin sterilisation for operations and ward dressings, are very trying to the skin of the house surgeon's hands, particularly in cold dry weather. Unless he takes

precautions, a few days of hard surgical work lead to innumerable tiny cracks and "hang-dogs" on his fingers; and if his skin is unusually sensitive his hands will soon be affected with an intractable form of dermatitis. In this condition he is peculiarly liable to staphylococcal or streptococcal infection, and a septic finger, with perhaps the loss of a nail or the appearance of an axillary abscess, is only too likely to result. Should he make a vaginal examination on a syphilitic subject or conduct a post-mortem without gloves when his hands are in this state the consequences may, of course, be even more disastrous.

What precautions, then, should the house surgeon take? After washing his hands at the conclusion of each afternoon's operations and each morning's dressings he should rub in, until absorbed, some soothing or stimulating preparation of glycerine, such as "Glycola," or glycerine and honey jelly, or glycerine and red wash, or glycerine and eau-de-Cologne—whichever he finds most suitable—and should clip off every little tag of skin, and press down with a blunt instrument the free margin of skin at the base of each nail. If the fingers are still cracked and sore when he goes to bed at night he should wash them in hot water, and, when dry, rub into them some lanoline and castor oil or Hazeline cream; and if the condition is advanced he should sleep in chamois leather gloves. Before the next day's work he should paint over every abrasion or fissure a film of "New Skin" or collodion, or he should wear aseptic india-rubber finger-stalls or gloves.

All this sounds very tedious and elaborate; but in practice it is easy to carry out, and if the preventive measures with glycerine preparations are regularly adopted, the disagreeable greasy applications are seldom necessary. "Glycola," etc., is kept on the washhand-stands in the wards and theatres of most hospitals, and its use soon becomes a habit, as pleasant as it is necessary.

If a scratch or cut occurs at a septic operation or post-mortem examination, it should be cleansed at once with antiseptics and covered with waterproof protective, or, better, enveloped in a large hot boracic fomentation for a few hours, and then protected.

Similarly, if a finger not previously known to be abraded becomes painful and hot soon after an occasion of this sort, it should at once be treated with wet antiseptic applications, as hot as can be borne. By this means the most virulent infections can often be aborted. Thus, soaking the hand in hot biniodide of mercury solution (1-1,000) is excellent early treatment for septic fingers. Should, however, the arm show signs of invasion, in spite of these measures, not a moment should be lost in seeking the aid of one of the senior surgical staff, for the worst forms of septic infection of the hand spread with the most appalling rapidity, and require immediate operation if life is to be saved.

THE BOOK WORLD OF MEDICINE AND SCIENCE.

STRAY NOTES.

Dr. Charles Moody relates his experiences among the American Indians in a chatty article which he contributes to a recent number of the *American*

Journal of Clinical Medicine. Particularly interesting is his experience of the "medicine man." "As is often the case,

if labour has not terminated so easily, the 'skiptiwat' is called in. He comes armed with all the panoply of his craft. I trust the reader will not accuse me of professional jealousy in dealing with this professional brother. He is an institution that no amount of civilisation has been able to eradicate. . . . Dressed in his robes he enters the tent, shaking his elk's-tooth rattle. He seats himself before the woman, and proceeds to exorcise the evil spirit. This may be a pair of interlocked twins, a footling, a shoulder presentation, hydrocephalus, or any of the countless accidents of accouchement—it does not matter in the least to my savage *confrère*. He fills his lungs with smoke, and exhales it slowly upon the bare abdomen. Perhaps that is sufficient. At any rate he waits to see. If the woman is not delivered shortly he shakes his head, and tries another remedy. How like the civilised doctor. Another wait. No result following, he tries his last trump. This consists of drumming out the devil. All the while he is chanting in a way that would certainly frighten the wits out of any sensible devil. Sometimes the devil is obstinate, and does not avail. In that case the 'skiptiwat' is at the end of his resources and—lets the woman die." Dr. Moody relates how he gained his first firm hold upon the affections of his Indian patients by succeeding in a twin pregnancy where the skiptiwat had ignominiously failed, and tells some interesting experiences to show how, "no matter how thoroughly you Christianise an Indian, the ancestral idea of a future existence still remains with him."

Examinations, so long as they foster the crammer and the cramming coach, will encourage condensed, desiccated cram books. The only justification for

Students' Aids. such manuals lies in the fact that many students find it worth while to go through their note-books the night before examination, and that such aids may take the place of the note-book. It is not altogether a valid justification. Personal note-taking, both at the bedside, in the out-patient department, and when reading, is far better than the reading of someone else's notes, no matter how good they may be, in record quick time before "going up." The series of "Students' Aid Manuals," issued by Messrs. Baillière, Tindall, and Cox, 8 Henrietta Street, W.C., is for those who have faith in such condensations, one of the best on the market. The volumes are cheap, excellently printed, and the information given in them is not altogether in tabloid form. The latest addition to the series is a handbook of "Diseases of Children," by John Caw, M.D., R.U.I., L.R.C.P. Edin., which is, indeed, a very good specimen of the best class of "cram book." There are many useful points in it, and the list of prescriptions at the end may be of service to the practitioner as well as to the student. The price is 4s. 6d. net.

Every year the General Medical Council publishes two volumes, the "Medical Register" and the "Dentists' Register." The former is a bulky volume, **The Registers.** retailed at half a guinea by Messrs. Spottiswoode and Co., Limited, 54 Gracechurch Street, E.C.; while the latter is much more slender, and costs 3s. 4d. This year's registers have been entirely

revised and enlarged. Neither of them, of course, permits of much annual variety, but the "Medical Register" gives some interesting statistics. Thus we find that during 1906 1,197 names were added to the register, as against 1,270 in 1905, while 700 names were removed. Of these erasures 611 were due to deaths in the profession, and one only to "cessation of practice." The others were in consequence of action taken by the Council in accordance with Sections xiv., xviii., and xix. of the Medical Act. The number of registered practitioners whose names figure on the register is at present 39,620.

We take a good many things for granted, without making question of their accuracy. When Professor Wright gave to medical science a new word, and a new

The Derivation method of diagnosis, most people were of Opsonin. content to accept the explanation that

"Opsonin" was a derivative from a "well-known Greek verb." Now Dr. Moore points out, in the current number of the *Homœopathic Review*, that there is no such word, or verb, as "opsono" in Greek. "The name appropriately given by Professor Wright to these substances," he writes, "is from $\delta\psi\omega\nu$, meaning boiled meats, anything eaten with bread to give it a relish, sauce, flavouring, or rich food. The word 'opson' ($\delta\psi\omega\nu$) is a substantive derived from the verb $\lambdaη\sigma\alpha\iota$, meaning 'to boil,' when used of metals 'to smelt.' Whereas this verb is found no further back in old Greek literature than Pindar's Odes, the substantive $\delta\psi\omega\nu$ is used in the 'Iliad' and in the 'Odyssey' of Homer." There is a Latin derivative, *Opsono*.

When there are so many excellently printed standard classics on the market, new "cheap editions" of old favourites are apt to be judged more **Cheap Reprints.** strictly, perhaps even more harshly, than is justifiable. In many cases cheapness, at least in the production of books, is synonymous with inferiority, with bad paper and worse printing, with ill-read, badly spaced lines, and with poor, inartistic illustrations. To a certain extent the paper used in such reprints must be of a lower quality than that on which more expensive volumes are printed, but there is no reason why bad type and bad reading should combine to make the cheap edition unattractive. Messrs. T. Nelson and Sons, who were among the first to issue handy pocket volumes of our old favourites, have maintained a generally high standard in their cheap lines, and are at present issuing a series of shilling reprints, neatly bound in tooled cloth covers, of the works of Alexandre Dumas. "The Three Musketeers" is their latest production, and although it has been unduly cut down in the margins, it is a thoroughly acceptable book, handy in size, and not unworthy to figure among the more pretentious volumes which lie on the doctor's table.

PATHOLOGY: GENERAL AND SPECIAL. A MANUAL FOR STUDENTS AND PRACTITIONERS. By J. STENHOUSE, M.A., B.Sc., M.B., and J. FERGUSON, M.A., M.D. The Medical Epitome Series. (London: Hodder and Stoughton. 4s. net.)

THIS, the first number of a series designed to aid not only the student but "the general practitioner who might wish to refresh or supplement his knowledge to date," is an epitome of pathological knowledge. In some respects—for instance, the sections on teratology and tumours—it is a little too elaborate; in others (as in the too brief condensation of pancreatic lesions), it is scanty. Here and there one notices a statement which might well have been omitted, and there are numerous printer's errors. With these few failings, the little manual, which is judiciously illustrated, very ably fulfils its purpose, and may be cordially welcomed.

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

THE UNITS OF GENERAL HOSPITAL CONSTRUCTION.

II. THE WARD UNIT (*concluded*).

The next illustration (fig. 6) is that of the ward kitchen, 13 feet by 9 feet, and its fittings are worthy



FIG. 6.—WARD KITCHEN.

of careful study. The window is of practically the same dimensions as those of the ward. The bossing



FIG. 7.—CLEANERS' SCULLERY.

is utilised as a cupboard, and the cupboard has a ventilating opening guarded externally by louvres, and internally by an iron frame covered over with gauze. As shown in the illustration, the doors of the

cupboard being open, the milk, butter, etc., for ward use are stored here, where they are free from dust and the heat of the kitchen. In the right-hand corner, next the window, is the sink with a teak drip-board attached. The sink is supplied with hot and cold water through a junction tap, and check valves are placed on both hot and cold water pipes, so that repairs may be carried out on the taps without emptying the pipes in other portions of the building. On the same side is a small coal range.

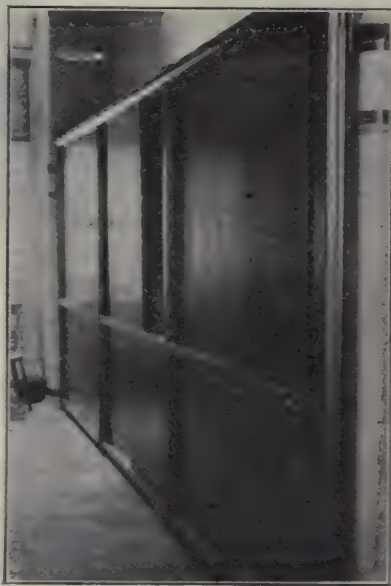


FIG. 8.—LINEN ROOM.

On the opposite wall is a dresser on wheels, which facilitates its being moved from the wall for the purpose of cleaning. Above the dresser are three cupboards with sloping tops, fixed to the wall by means of galvanised iron brackets. One of these cupboards is of iron and used for the storage of bread, the doors and sides being perforated for ventilation. The second is fitted with racks and pegs for crockery. The third is for the private use of the nurse.

It may be noted that there is no inspection window into the ward. This is not considered necessary, nor is it desirable in a ward with acute cases, as only a limited number of beds can be within view. In a well administered hospital the inspection window has become obsolete, and it has the structural disadvantage of breaking the wall-surface and adding ledges where dust may collect.

The next illustration (fig. 7) is that of the cleaners' scullery, 12 feet by 5 feet, adjoining the ward kitchen, and containing a coal-box on wheels, a sink, similar to that in the ward kitchen, with hot and cold water tap placed high enough to let a bucket be filled with ease, a rack for brushes and a

basket for dusters, etc. Everything is exposed, and there are no corners for articles to be hidden or dirt to collect.

Fig. 8 illustrates the room for the storage of the ward linen, 12 ft. by 6 ft. 6 in. This room is fitted up with presses having sparred shelves, and ventilated top and bottom. The doors are made to slide on metal rollers in metal grooves. It is an advan-



FIG. 9.—PATENT SWIVEL BATH.

tage to have all the main heating-pipes passing through this room, as it ensures everything being kept thoroughly dry.

The patients' lavatory is 13 ft. by 5 ft. 10 in., with bathroom adjoining, and built out from it is a private lavatory for nurses, 4 ft. by 3 ft. 6 in. The patients' lavatory contains two basins with hot and cold water supply. On the opposite wall is a portable bath with an arrangement for filling and emptying. This bath is on four wheels, and can be removed to the bedside when necessary. Over the portable bath is placed a metal rail 5 ft. from the floor, and projecting 1 ft. from the wall, where mackintosh sheeting and jaconet may be hung up to dry. Adjoining the lavatory is the patients' bathroom. The bathroom, 9 ft. 6 in. by 6 ft. 10 in., is placed at the entrance to the ward, so that a patient may be bathed before admission without requiring to pass through the ward. The objection which is sometimes raised to having the bathroom placed in this position is that it occupies too much space, and requires additional drain pipes. By adopting the bath here illustrated, which has been specially designed for this ward unit, a large bathroom is not required. It is necessary that the nurse or attendant should be able to get on either side of a hospital bath, and by means of the swivel arrangement this can be accomplished in comparatively small space.

The bath is supplied with hot and cold water through a special valve fixed on the wall, worked by a movable key. The key can be removed by the nurse, so that patients cannot waste water by leaving it turned on. The valve is arranged so that cold, hot, or tepid water can be had as required, but the cold supply must be turned on first, in this way preventing any possibility of scalding the patient. The drains for the bathroom and lava-

tory are disconnected from all sewage pipes, and are exposed on the outside wall.

The ward sisters' duty room is 12 ft. by 8 ft. 3 in. Here she keeps her books and interviews her nurses. The furnishings are simple, consisting of a writing table with row of drawers, a corner cupboard, an easy chair, and two small chairs.

The visiting physician's private room is used for interviews with his assistants, and here he keeps the charts and records of his cases and any instruments, such as microscopes, required for teaching purposes.

Fig. 10 illustrates the laboratory or test-room. This room should have a large window without any mullion, so that there is no obstruction to light. It is fitted with a sink with hot and cold water, and a centrifuge worked by water pressure from the cold water pipe. On the opposite wall are cupboards with shelves for test and stock bottles, and drawers of various sizes for the storage of diagrams, charts, etc.

In order that convalescents may be more easily supervised, and that no light or air may be cut off from the corridor, the day room is simply divided from the corridor by a plain wood partition 4 ft. 6 in. high at the centre and 7 ft. at the end. Here the convalescents have their food, and they can amuse themselves without disturbing the patients in the ward.

The washing and examination-room is used for the examination of patients who have been in the hospital and return to be seen by the visiting physician. It is also used for the thorough washing of patients before being taken into the ward who cannot be put in a bath. A porcelain slab moving on a pivot, similar to the arrangement for the revolving bath, is fixed in one corner of the room, and a swivel bath



FIG. 10.—LABORATORY OR TEST ROOM.

in the other. The room is specially heated, so that there is no danger of the patients catching cold. The provision of this room does away with the objectionable practice of taking return patients into the ward and placing them in beds for purposes of examination without being properly bathed; it also allows the nurse to get the patient thoroughly cleaned before admission. There is no doubt that vermin, if not infection, is sometimes introduced into a ward when return cases are admitted for examination, and the provision of such a room as is here described does away with any such possibility.

CURRENT HOSPITAL TOPICS.

Bristol General Hospital.

AMONGST older hospitals in the provinces; few present more interesting and attractive features to the observant than this institution. The system of electing the medical officers by a committee of governors, elected annually, is modern and up-to-date. There is an active Ladies' Committee, and the Medical Departments of the Hospital include one each for the Throat and Nose, for the Skin, the Eye, the Ear, Diseases of Women, Electric Light Treatment, Bacteriology and Pathology. The report is attractively illustrated, well printed and full of interest. We are surprised, however, to notice that, the accounts are not kept upon the Uniform System, which places the institution under a disadvantage, as its work cannot be readily compared with that of similar institutions, which must prove a drawback to the Hospital in many ways. We should recommend the appointment of an economy committee, which might take up the whole question of accounts, the purchase of stores, dieting, and a large number of other items, with results which we think might possibly surprise some of its most zealous supporters. We are glad to see in this report the portraits of the President and the Treasurer, two Bristol worthies, in the persons of Mr. William Proctor Baker and Mr. Joseph Storrs Fry. The report reflects great credit upon the Committee and its Secretary. The Bristol General Hospital too, has been unusually fortunate for many years in the *personnel* of its Nursing Staff, the head of which has usually been a lady of marked administrative ability and acumen. The present Matron, Miss Sophy Morris, is a worthy successor to several eminent predecessors.

Westminster Hospital.

THIS Hospital has issued its 189th report, a fact which must commend the institution to the sympathy of all Londoners. It is often felt, that, a hospital, situated in the heart of a large town, cannot be an ideal residence for sick people, hygienically. At the Westminster Hospital in 1906, however, although upwards of 200 more patients were admitted to in-patient treatment, the average number of beds occupied for the whole year was 8 less than in 1905, a fact which we attribute to the circumstance that, the mean residence of each in-patient was under 25 days, a reduction of one and a half days per each patient compared with the previous year. The Committee attributes the slight decrease, about one-twenty-fifth, in the number of out-patients, to the prolonged summer weather, but we hope it may be due in a large measure to the efficiency of the work done by the almoner. The Committee properly express much regret at the retirement of Miss

Nussey, who has filled the office of Lady Almoner for seven years with marked efficiency. Her successor is Mrs. Crace, who it is hoped will show equal skill and tact in dealing with the patients, and equal helpfulness in obtaining for them convalescent treatment and surgical appliances, where necessary. That the Hospital has up-to-date Departments, is indicated by the circumstance that, upwards of 300 more patients were treated in the Electrical Branch last year, than in 1904. A point is made of the fact that some forms of diseases of the skin which entailed protracted treatment in former years, are now quickly cured by the application of Röntgen Rays. Unfortunately, the ordinary expenditure exceeded the ordinary income by £5,400. The average cost of each occupied bed is stated to have been £92 7s. 3d. in 1906, an increase of about 5s. per bed as compared with the cost in 1905.

A Much-needed and Growing Hospital.

WANDSWORTH OWES a heavy debt to Canon Erskine Clarke, Chairman of the Bolingbroke Hospital, which he not only founded but has largely supported during many years, in addition to the heavy claims made upon him by parochial duties and the care of several churches, all of which responsibilities he has discharged with exemplary diligence and success. It is one of the most remarkable features of the Church of England from a layman's point of view that, Canon Erskine Clarke should not have been promoted to high office in the Church, for there are few better men of business among the clergy, few more generous spirits, and few whose administrative gifts can compare with his own. The growth of the Bolingbroke Hospital has been steady and increasing. Eight years ago, only 217 accidents and emergency cases were admitted, but in 1906 they amounted to 654. No better evidence could be afforded of the urgent necessity which has grown up for the erection of the new wing which is now approaching completion. Ministering to the needs of a poor population of probably 400,000 people, it is lamentable, though not surprising, to find from the report that, the completion of the new building has been delayed for want of money, for any intelligent and wealthy man of business, who desires to do real good with his money, would find at Wandsworth an opportunity of a very high order. Indeed, the more closely the work is investigated and the better it is understood, the larger is likely to be the contribution of intelligent givers. Wandsworth is a district which has greatly changed of late years, by the influx of an ever-increasing number of poor people, who have changed the whole character of a large portion of the district, which used to contain the residences of many well-to-do and wealthy

people. The poorer the district, the greater the need for adequate hospital accommodation, a fact which we commend to the many large-hearted and generous supporters of hospitals, who may be blessed with a superabundance of this world's goods.

The Annual Report of the Hospital.

We have often felt that the report of many hospitals might be made far more interesting than it is at present. In the older institutions it would very often be an advantage to appoint a small editorial committee including the most literary minds available, to whom the report in its entirety might be referred, with instructions to suggest novelties and improvements in its form and contents. Each hospital is a small republic in itself, and the daily life in the course of each year presents some novel and many amusing features, which should help to illustrate the work, and so to instruct the governors. Where the report has literary merits and attractive features, the custom of sending a copy to each subscriber and governor annually, is, frequently, productive of renewed and increased contributions, and indirectly of securing legacies. Some hospitals which are kept up to date appreciate the points we have urged, and their reports leave little to desire. The Poplar Hospital for Accidents in this respect may be regarded as a pioneer. Each year the report

has a new cover, carefully thought out and well designed and attractive. No point that can be made to tell in its favour is omitted, and the type and paper, as well as the contents, exhibit no little ability. We are not sure that we like the departure in this year's report of putting the income and expenditure account at the beginning, though of course finance is the bed-rock upon which every prosperous voluntary hospital must rest. The fifty-first report commences with a paragraph in red ink urging subscribers to come and see the hospital, and referring them to a plan on the cover, which shows them how to get there. This is a good idea and might be generally adopted. Then there is an appeal for a new Convalescent Home, which is tersely and forcibly put. It has the merit of starting the appeal for £5,000 by setting forth a preliminary list of generous givers, who have promised one-tenth of the total sum asked for. It is a business document as every such appeal ought to be, and wisely expresses the hope that those friends who have helped in the past will come forward again, for the scheme of the Convalescent Home must prove of practical value to every working man who becomes an in-patient. A further point is made that, this home will prove, in reality, an extension to the Hospital work, at a cost far below what an extension of the present Hospital buildings must involve.

SOCIAL AND POOR LAW PROBLEMS.

SUGGESTED CHANGES IN THE POOR-LAW.

THE Boards of Guardians throughout the country are considering the suggestions which they will lay before the Royal Commission on the Poor-laws when that body shall examine them. The proposals vary in different localities, but some poor-law problems are universal, and therefore we find that identical, or at least similar, suggestions come from several places. One very general proposal is that illegitimate children should be compelled to support their mothers. At present the illegitimate child is free from the liabilities of the child born in wedlock, which may indeed be but a poor compensation for the stigma under which he lives, but is certainly unjust to the more respectable poor. This change, if carried, may, however, affect other than paupers. At present the mother of an illegitimate cannot benefit under the Workmen's Compensation Act if by the death of her child she is deprived of her means of support. If the liability of illegitimate children in law is accepted in the case of parish relief, it would probably have to be extended to any case where the child had been voluntarily supporting his mother and she was deprived of his support through such an accident as would justify her, if a married woman, claiming compensation under the Act. The question of illegitimacy has a bearing also on the proposals made by several Boards to seek compulsory powers to detain in the workhouse women of loose character—a phrase which may be taken to mean mothers of more than one illegitimate child. It is proposed to keep these in the workhouse for periods varying from one to three years. In the case of women of absolutely immoral nature this might only have the effect of preventing their coming into the workhouse for their confinements. Of more definite value is the proposal

to seek powers to detain feeble-minded men and women. The mischief done to the race by feeble-minded persons becoming parents can hardly be reckoned, and it would be better for themselves, as well as for the nation, that when they come under the Poor-law they should be protected against their own weaknesses. Another point from which most parishes suffer is the improvidence of pensioners—army and others—who receive their pensions quarterly, spend all in a short time, and come upon the Guardians for support until the next instalment is due. The Carmarthen Guardians would like to have pensions paid monthly, while those of Gloucester went farther and suggested weekly payment, but this latter proposal was finally given up as impracticable. Other suggestions deal with the provision for epileptics, but are of various kinds. Aberystwith desires that separate homes should be provided for groups of small workhouses for the reception of epileptics, Carmarthen specifies only that epileptics should be kept at some place other than the workhouse; Gloucester seeks compulsory power to send them to isolation homes; while Chesterfield would like a Government grant of 4s. per week towards the maintenance of imbeciles and epileptics detained in workhouses. The Bourne Guardians desire the power to order people to the workhouse, and those of Carmarthen would like at least to have the power to remove to the workhouse sick paupers who could not be properly attended to outside. Of course it is not likely that all the suggestions made will be accepted by the Commission; but the knowledge which its members will gain from the opinions of those who have to deal with the difficult problems of the poor and their needs will doubtless have a useful effect.

NEWS AND COMING EVENTS.

THE King has sent a present of linen to the Chelsea Hospital for Women.

THE King's Hospital Fund Bill was read a second time in the House of Commons on May 13.

At the thirty-ninth annual banquet of the French Hospital in London, it was announced that the amount received in response to the appeal for funds towards the enlargement scheme totalled £4,490.

PROFESSORS VON LEYDEN and Erb, of the universities of Berlin and Heidelberg respectively, have been elevated to the rank of Privy Councillors of the First Class, with the title of Excellency.

DR. ALFRED HOWELL has been appointed honorary assistant physician to the Cardiff Infirmary, in the place of Dr. Arthur Taylor, who has been appointed honorary physician to the institution.

THE Norrisian Professor of Divinity at Cambridge (Mr. F. C. Burkett) has received the honorary degree of D.D. from the University of Edinburgh. Although he is a member of the Cambridge Theological Faculty, his own university has found it impossible to confer a similar honour upon him—because he happens to be a layman.

HEBBURN owes a good deal to the help given by the late Mr. and Mrs. Arthur Coote, who interested themselves in almost every local agency for the betterment of the people, and particularly in the local infirmary. Lately, two portraits of these two benefactors of the Hebburn Hall Accident Infirmary, presented by the family, have been unveiled.

WITH reference to the retirement of Dr. Frederick Taylor from the post of senior physician to Guy's Hospital, we are requested to state that he was appointed assistant physician in 1873, and that his total service to the hospital as assistant physician and physician has been thirty-four years. If his student days are included Dr. Taylor's connection with Guy's dates back upwards of forty years.

MIDDLESEX HOSPITAL has many influential friends, who assembled in large numbers to support the Duke of Connaught at the festival dinner on May 10. For 150 years Middlesex Hospital has done yeoman service to the suffering and the sick. It contains 341 beds, and treats 40,000 out-patients annually. One of the most useful sides of the work done at Middlesex Hospital is the cancer charity. Here 159 in-patients and 47 out-patients are under treatment. It would be difficult to over-estimate the services which this department has rendered to the community since it was first opened in 1792. The Duke of Connaught made a most eloquent appeal, which resulted in subscriptions amounting to £4,500.

THE West End Hospital for Nervous Diseases, 73 Welbeck Street, W., is appealing for funds in aid of its extension scheme. On an average 64,000 out-patients' attendances are registered annually, and there are necessarily a great number of adult patients who require indoor treatment; 25 adult beds have been provided at a cost of about £2,000. As the space in the hospital is so limited, and there was no means of acquiring any of the adjoining property, the accommodation for these beds has been found as near the hospital as possible. The committee has purchased a site for £2,500. For some years past the nursing staff have had to be housed some distance from the hospital, going to and fro to their work. With the change proposed, accommodation can be found for the nurses also.

THE Out-Patient Visitors' Report of Guy's Hospital states that of 41,118 new out-patients interviewed in 1906, and from whom particulars of their circumstances in life were obtained, only 124 persons were found ineligible to receive the benefits of the charity.

H.R.H. PRINCESS LOUISE, DUCHESS OF ARGYLE, has been especially zealous in the cause of the hospitals during the last few weeks. On May 14 she opened the new out-patients' hall in connection with the London Temperance Hospital. The Chairman of the Hospital, Sir Vezey Strong, presented Princess Louise with an address, which was also signed by the treasurer and hon. secretary. 25,216 out-patients, or a daily average of 218, were treated at the hospital during 1906. £3,000 is still required to discharge the whole of the liability incurred by the erection of the new buildings.

THE Festival Dinner of the Royal Waterloo Hospital for Children and Women at the Savoy Hotel on May 14 was a very pleasant function. The Duke of Argyll and H.S.H. Prince Alexander of Teck showed great interest in the institution, which has recently been rebuilt and has only a third of the ward accommodation occupied at present owing to want of funds. The new wards are airy, light, and pleasant, but the out-patient department is badly planned, and, in view of the approaching summer weather, should be rearranged without delay. The Secretary, Captain Houston, has worked very hard for the dinner, which produced £1,300.

AN electric motor ambulance service for the City was inaugurated on Monday, May 13, by Alderman Sir A. Newton, Chairman of the Police Committee. A temporary ambulance station is near St. Bartholomew's Hospital and King Edward Street, Newgate Street. It is estimated that two thousand accidents happen each year in the City streets, and fifty-two call-boxes have been erected at the most convenient centres, to enable the police on duty at the spot to instantly communicate with headquarters and with the motor ambulance station. Practically the whole of the City Police force are first-aid men. The new ambulance is of eight-horse power, and can carry two patients in a recumbent position and three others in a sitting posture. If the motor ambulance proves successful, two others will be added in due course.

THE new wing and extension of the Glasgow Samaritan Hospital for Women have just been opened. The new wing contains four large wards with accommodation for ten beds each, and four smaller wards for three and two beds each, two large convalescent rooms, two well-equipped operating rooms with surgeons' rooms attached, two ward sculleries, and ample lavatory provision. The extended hospital now contains accommodation for eighty-six beds, and is the largest women's hospital in the United Kingdom. The administrative block between the old and new wings has been entirely remodelled. A new doorway and large entrance hall has been provided. A new office occupies the old board room. The new board room adjoins the lecture room and is separated from it by folding partitions, and when these are thrown open a hall is formed with accommodation for 150 persons. Provision will also be made for the meetings of the Ladies' Auxiliary Association and the work of the Dorcas Society. The cost of building and furnishing the new wing and operating rooms, together with the other additions and alterations, has amounted to over £12,000, while the total cost of the whole hospital buildings, including nurses' home and dispensary, with their equipment and furnishings, has been about £40,000.

NURSING ADMINISTRATION.

VOCATION OR LIVING.

THE distinction between the woman to whom nursing is a vocation and the woman who merely earns her living by nursing, is a very real one, although it is a very difficult one to define. It does not lie in the possession of any particular quality by the one which is lacking to the other. A nurse may be full of faults and yet have a true vocation; while, on the other hand, a woman of the most estimable type may be lacking in the smallest spark of the divine fire. Nor does vocation lie in outward circumstances of birth, or education, or wealth. The vocation for nursing leaps out from the humblest, as well as from the highest homes in the kingdom. Its one shining mark is its vitality. It is able to stand a test. The nurse with a vocation may fail miserably in her first month's trial, and even be dismissed with well-meant advice to try other work. Undaunted she will begin lower down, and after a year in a smaller institution, will try again and succeed. The woman with a vocation may be hampered by external circumstances, as was one of the ablest matrons among us, on whom the task was laid of mothering twelve brothers and sisters through their school days, before her life work could begin. She may be naturally bad-tempered and impatient of control. A true vocation will teach her self-command. She may be rich and pleasure loving. Her vocation will lead her to love a simple life. She may be ignorant. Her vocation will be to her an education. It is only through conscientious surrender to training that the vocation can be perfected, and it is equally true that only in those who possess vocation can training do its highest work.

But there is much to be said for the simple straightforward motive of desiring to earn a living. It is an unsafe thing for any profession to depend for its supply of members on exceptional people. And women with a purpose in life strong enough to overbalance all personal considerations, are exceptional. There are many safeguards in the necessity for looking to the work of one's own hands for independence. The woman who sets out to earn her own living knows that every step in her career will either advance or retard her future prospects, and the knowledge works tolerance under unpleasant conditions, patience under apparent injustice, simplicity in the discharge of mechanical duties, in short, a spirit of duty. The labourer is worthy of his hire. And no strong development of nursing can be anticipated in directions which do not afford a prospect of independence and the means of securing a future competence. It is for this reason that the development of village nursing is at the present moment grievously cramped, notwithstanding the urgent call for workers in this field.

When the hospital training is ended, and the nurse looks out into the future, the problem of "vocation" or "living" becomes an insistent one. It may be broadly laid down that "vocation" trends more to the nursing of the sick poor in hospitals, and in district work; while "living" is best

secured in private nursing among the rich. It would be ridiculous to claim a spirit of pure devotion to their calling for all nurses working in institutions, just as it would be impertinent to deny it to those working in the homes of the rich. Many women cling to institution life from a preference for routine or want of energy to make a change long after a change would be desirable from all points of view. And many women are carrying out their vocation in the highest sense of the term, under the varied and difficult conditions which surround the private nurse. But it is necessary to face the fact that for the woman who enters the calling of the nurse, simply and solely to make money, there are attractions in private nursing which are not to be found in any other branch of nursing work. The unfortunate consequence of this is that the defects of these nurses—they are often exceedingly clever from a technical point of view—are displayed just where they are thrown into most prominence. Probably this fact accounts in great measure for the extraordinary virulence exhibited occasionally towards nurses as a class, by persons who ought to know better. It helps to explain why the nurse of fiction, the nurse of the newspaper, is a being unknown to many who yet have passed their lives among nurses. The remedy does not lie in registration, for love of money could scarcely be held by the most drastic disciplinarian a proper ground for removal from a list of registered nurses. The remedy lies in deepening the sense of vocation in nurses wherever their work may lead them, and in instilling into probationers during the time when they are wholly under the influence of the training school, a purpose in life higher than that of the bread winner.

It is difficult to seize and put into words the form under which vocation makes itself felt to the mind. But in its widest developments it is pre-eminently Christian and altruistic. It is the vital principle which desires to give out of the abundance of the heart to those who lack. But as centring on nursing it is the desire for the succour of the body, even more than the mind or the soul, or the outward circumstances. It may be claimed for it in this connection also that it is an eminently Christ-like purpose. So far as God revealed Himself in His Son, He stands revealed as hating sickness and infirmity; willing the race to be strong, healthy, and free from bodily defect. The unhappy view of life which linked "God's will" with disease finds no support in the Gospels, and under the eye of science is rapidly disappearing. The essence of the nurse's vocation is that it calls her forth to aid in that mighty battle against disease in which the banners of God's Will are waving the race on to victory. To-day, for the first time in the history of ages, the foe is losing ground. Not till the citadels of disease and despair have crumbled to the ground shall the nurse's vocation pass from among the inspiring forces of womanhood.

THE COMMON TASK.

THE CARE OF THE MILK IN INSTITUTIONS.

THE measures recommended by the Special Committee of the Royal Institute of Public Health for ensuring a clean milk supply, would, if carried into effect, probably abolish altogether the necessity for sterilisation. They relate to the maintenance of a healthy stock of cows, hygienic premises, cleanliness on the part of the milker, prompt refrigeration, and careful transport. It is disheartening to know that legal control over the milk trade is already in the hands of the local authorities, by means of the Order of 1885, but that this Order is in most districts a dead letter owing to the supineness of the local sanitary authority. What is needed, undoubtedly, is that the Order, or better still the Order amended as recommended by this Committee, should be rendered compulsory, and not permissive. It is astonishing that while public attention is repeatedly called to the filthy conditions under which the average dairy farmer carries on his business, so little effort should be made by those on whom the duty of regulating the trade rests to cope with the notorious abuses to which it is exposed. The proposed registration of dairymen is essential to any real control over their premises. It will take a vast deal of rigid inspection to educate the ordinary farm-hand into notions of cleanliness in the milking process, and we believe that the provision of proper lavatory accommodation in every milking shed for the ablutions of the milker, who, it must be remembered, is commonly the person responsible for cleaning out the stables, is an important point. This is a detail which has escaped the attention of the Committee, but unless the labourer has the washing made very easy for him, no amount of regulations will induce him to wash. With regard to means of transport, can no substitute be found for the ordinary pewter churn? The battered and dirty appearance of these vessels, both outside and inside, whether dirty or clean, seems to make the rinsing process a veritable work of supererogation. Even in hospitals where all else is shining with elbow grease, the milk cans, unless newly bought, are conspicuous for their dinginess. The practice of bottling the milk and despatching it packed in cases, which has been found practicable on the Continent and in America would be an ideal system for the institution, and would obviate all possibility of contamination.

NURSING WITHOUT A NURSE.

There are still many people who for want of means, or through poverty, are compelled to nurse their sick relatives by the light of their own intelligence and the doctor's directions. For such, the little book on "Sick Nursing," by H. Drinkwater, M.D. (Dent and Co., 1s. net) will prove a great source of enlightenment and cheer. Intended primarily for the use of students in connection with St. John's Ambulance classes, it is well fitted to be a guide to the public in such matters of health and

sickness as concern the laity. We think it might be useful for the relatives in many cases of illness, even when the help of a trained nurse can be obtained, since the reason for measures they see the doctor and nurse carrying out are concisely stated, without the smallest digression into the sphere of matters purely medical. In this way nurses will find it a useful auxiliary with "the family."

THE HOSPITAL BALCONY.

THE balcony as an adjunct to hospital treatment has hardly yet met with sufficient recognition at the hands of the architects. It is seen to full advantage at Addenbrooke's Hospital, where the noble proportions of the wards are enhanced by the colonnades extending along the façade, and affording the best possible opportunity for open-air treatment. Here, summer and winter alike, looking over the lawns of the hospital to great elms in the background, where rocks are perpetually busy, the patients lie accommodating themselves easily to changes of temperature and imbibing such a taste for air as shall revolutionise their homes from that time on. It is not only phthisical patients who respond to this treatment. The outdoor section of the surgical ward is a strong feature of the hospital; there is space for twelve beds, six male and six female, under the broad colonnade which lines these wards; the effect upon obstinate wounds and ulcers is eminently satisfactory, and obviates the difficulty of finding convalescent places for such patients. An outdoor annexe to a ward undoubtedly adds much to the responsibilities of the nurse. She cannot keep the whole ward under supervision at the same moment, and must be perpetually on guard lest any of her outdoor patients, especially the new ones before they are acclimatised, are exposed to serious discomfort. Besides, the weather requires a certain amount of watching, for scuds of rain on that side must be guarded against with screens or waterproof blinds. It may be assumed, however, that whatever tends to widen the duties of the hospital nurse, adds to the value of the training received. And experience in the management of open-air patients is a very valuable asset for the private nurse. The continual development of open-air treatment, both in surgical and medical cases, renders it imperative that the nurse should understand its peculiarities, and be trained in the exercise of tact in carrying it out. And this may be more suitably done in a hospital where it forms part of the regular work than in sanatoriums where, as a rule, only mild cases are received. If the town and county of Cambridge could only awake to a full perception of the work which is being carried out under their eyes as they pass to and fro, the pressure of financial care would speedily be lifted from the shoulders of the hospital authorities.

PREMIUMS FOR PROBATIONERS.

We note that the entrance fee for probationers at the Royal Portsmouth Hospital is £5, and not £1 la. as stated.

EDITOR'S LETTER-BOX.

[Our Correspondents are reminded that prolixity is a great bar to publication, and that brevity of style and conciseness of statement greatly facilitate early insertion.]

DIAPHRAGMATIC PLEURISY.

SIR,—Dr. J. A. Nixon, in his paper in your issue of May 11, 1907, omits to mention as one of the symptoms a fixed severe pain in one or both shoulders over the fourth cervical area. This is not very uncommon: is almost always overlooked, because not one medical man in 500 probably knows of it. I have seen it myself, and have known it to be overlooked.

So far back as 1890 (I write from memory) Dr. John Ferguson wrote a short paper in *Brain* on "Sensory Fibres in the Phrenic Nerve." In it he detailed the result of some experiments he made in cats. In Dr. Henry Head's famous papers in *Brain* some few years later he referred (very briefly and inadequately, however) to shoulder pain in connection with the diaphragm.

In December 1896 a very near medical relative of mine wrote to me about his wife who, recently confined, had febrile symptoms and a fixed severe pain in one shoulder that had completely puzzled him and another medical relative of ours. Knowing of the shoulder pain of diaphragmatic pleurisy, and knowing further that the patient had had pleuro-pneumonia, I wrote and told him of the connection between shoulder pain and lesions of the diaphragmatic pleura, and advised a blister over the region of the diaphragm on the affected side. He replied it was too late for my blister (clearly the trouble had resolved meanwhile). I remember that soon after I read Dr. Ferguson's paper in 1890, I asked my brother, Dr. Percy Kidd, if he had ever seen shoulder pain in diaphragmatic pleurisy. He said he had once or twice.

I admit the connection is probably not very common, but I do say that it is always almost overlooked because the anatomical connection between the phrenic and the acromial branches of the cervical plexus is forgotten. The result is the chest is not examined; further, as these conditions almost certainly often get well of themselves, the connection is almost certainly much commoner than is believed.

I am certain that in those cases of habit-spasm that show hiccup and grunting spasmodic noises there is often underlying them old diaphragmatic pleuro-pneumonia or pleurisy. I pointed this out to a famous neurologist one day in the Queen Square Hospital; it was evident the matter was new to him, and he was sensible enough to see at once what a good point it was.

I am, Sir, yours faithfully,

LEONARD J. KIDD, M.D.

35A Welbeck Street, W.

General Practitioners' Contributions.

Important.

WE propose to devote a special page to General Practitioners' Contributions. We therefore invite from practitioners contributions based upon their experience in the management of cases, and in the treatment and diagnosis of disease; especially shall we be prepared to welcome articles dealing, practically, with treatment, and with the use and value of new remedies and methods.

No article should exceed 1,100 words in length, and, if accepted, one guinea will be paid to the writer after publication. Each communication should be accompanied by a stamped directed envelope for the return of the MS. if found unsuitable.

The Relaxations of Medical Men.

We shall also be glad to pay for accepted contributions, from any member of the profession, on the subject of the relaxations of practitioners. This opens up a wide field, as it includes natural history, photography, sport, indoor recreations, and motoring. Whenever possible, original illustrations and photographs should be sent with the MS.

Suggestions Invited.

The Editor will welcome suggestions for the establishment of any new section in *THE HOSPITAL*, and will be glad to supply information on any subject of interest or importance to members of the profession in any part of the world.

Notices and Answers to Correspondence.

All MSS., letters, books for review, and other matters intended for the Editor, should be addressed to THE EDITOR, The Hospital Building, 28 and 29 Southampton Street, Strand, London, W.C.

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SATURDAY, MAY 25, 1907.

THE ETHICAL ASPECTS OF MEDICAL CONSULTATION.

THE various "Divisions" of the British Medical Association have recently been invited by the Ethical Committee of the Association to consider a special report on the subject of consultants and professional consultations, and to vote "aye" or "no" on a series of specific recommendations attached to the report. In due course the decisions, whatever they may be, will come before the representative meeting, and it is anticipated that in this way will be formulated a code of rules which will exercise control, on the subjects with which they deal, over the practice and custom of the members of the Association. It is premature to speculate on the issue of the discussion, but it is manifest that it may have important consequences both for the profession and the public, and thus it is well that the recommendations of the Ethical Committee should be most carefully examined. There can be no question that in connection with professional consultations positions of some delicacy, involving both ethical and personal considerations, do sometimes arise, and hence it may be allowed that an attempt to frame rules to meet the various possibilities of difficulty and controversy is a legitimate and proper proceeding. All that need be added to this general remark is that such rules must not be unduly rigid, and obviously they must in no wise obscure the very first claim of medical practice, the safety and welfare of the patient. The public mind is for the most part in a very much befogged condition in regard to a supposed code of medical etiquette, which, by the way, is mainly the creation of its own combined imagination and ignorance, and it is not in the interest of the profession to increase this mental confusion. But there can be no objection to the framing of rules which will increase smooth and dignified working between members of the profession themselves, and will, at the same time, recognise that the profession exists for the purpose of public ministry and service.

The first suggestion in the Ethical Committee's report which calls for discussion is the proposal to establish the formal recognition of a distinct class of practitioners to be specifically designated, "Consultants." The qualification for this class appears to be the restriction of practice to patients introduced by other practitioners, and abstinence from

regular attendance on any cases. There is, however, no indication of the provision of any machinery by which these proposals can acquire actuality. What body or authority, for example, will have power to permit or authorise the use of the designation, and how are claims to it to be examined or established? Suppose, again, that a practitioner adopts and professes the term "Consultant," and it is subsequently urged that he has, in one or more instances, acted inconsistently with the terms of its definition. Is he to be liable to pains and penalties? And, if so, how are the necessary inquiries to be conducted and the punishment, if any, enforced? These and related questions will inevitably arise if the proposal is adopted, and if, which is more than doubtful, anyone troubles to take the slightest notice of it. But even were it possible to make the proposal effective, we question whether it would be advisable to do so. There is about it a rigidity and inelasticity which hardly accommodate themselves to the duties and responsibilities and varying conditions of professional life. The broad position, as generally, and we believe wisely, recognised at the present day, is that every qualified medical practitioner is free to choose whatever line of professional work he desires. He is "legally qualified" in all departments of practice, and no one has the right to restrict his activities. Of course this implies that it is his duty to equip himself to the level of his pretensions, and he must needs accept responsibility both for his professions and his activities. But there is no right or title to forbid his cultivation of any opportunities which come to his hand, and no one may confine him within the borders of any special or restricted province. With all this it is common knowledge that certain practitioners have acquired special experience in particular departments, and to these, naturally, cases of doubt or difficulty in such departments become referred by their *confrères*. All this is going on with little or no trouble, and the general practitioner is perfectly well able to distinguish the real from the pretended consultant. To propose the institution of a special designation to aid in this distinction is more likely to cause confusion than to afford help, for it is not improbable that the term will be mainly flouted

by those who are least qualified to bear it. The fact is that no amount of affirmation or restriction can make a practitioner in any real sense a consultant. Such a position depends on the recognition of special knowledge or ability by those competent to judge; that is, by other members of the profession. Hence the proposal that a practitioner who professes a certain rule of practice, and who apparently may be innocent of all experience, shall have the right to adopt the term "consultant," is little short of ludicrous, and is calculated to mislead the public, and even in some instances members of the profession. Further, such a proposal involves a slight on many senior practitioners who, engaged for years in general practice, come to be recognised by their colleagues and neighbours as capable of affording valuable help and counsel in many circumstances of difficulty. Men of this type and quality enjoy a high measure of respect and regard, and they represent to the public a welcome and most effective presentation of the capacity of the profession. Is

it to be said that because these gentlemen have their own private patients they cannot claim a rank and distinction which may, perchance, be the boast of the junior member of the local hospital staff? The question is to be answered by the logic of facts, and not by the provision of artificial definitions. Medicine has already a sufficient confusion of names and titles, and we cannot think the profession will welcome a suggestion to increase the number.

Short of the preliminary proposition above discussed, we have no very urgent objection to the Ethical Committee's proposals. Some of them will not easily be enforced, even though the principle they contain is sound, and many of them suggest what hardly needs suggestion where courtesy and a sense of responsibility exist. But if there are men who will be helped by the announcement that punctuality is a virtue, and that it is polite to acknowledge the receipt of a courteously expressed letter, by all means let us have these and similar inspiring precepts duly supported by the fiat of the British Medical Association.

CANCER AMONG THE INCAS.

THE ancient inhabitants of South America, the Incas of Peru, are of unknown origin; but it is certain that to all intents and purposes their evolution took place upon lines quite independent of that of European man. It would be extremely interesting to know whether, previous to the invasion of the Spaniards, the general pathological processes which occurred in these Incas were similar to those of Europeans. The point is of scientific rather than of practical importance; and yet it is of some definite value to an English physician, who may practise in almost any part of the world, to know whether or not the general pathology which he studies at home is likely to hold good all the world over. It might be of considerable service, moreover, in deciding between the "microbial" and the "developmental" theories of cancer. If we could determine with certainty that malignant new growths were non-existent in South America previous to their importation from Europe, and if at the same time we could be sure that tumours of known developmental origin occurred in Incas in just the same way as they do in Europeans, it would be some argument against the developmental origin of the former. If, on the other hand, it could be definitely shown that the Incas had malignant new growths precisely similar to those of Europe, one would either have to allow that the cancer "microbes" arose by evolution in South America simultaneously with their evolution in Europe, or else, what would then seem more likely, that these neoplasms are developmental. The argument would be circumstantial rather than direct, but it would at least have great interest and value.

The first step in this direction was taken by Pro-

fessor Virchow in 1886, when he wrote a paper upon "Pathological Bone-changes in the Ancient Inhabitants of Peru." In this paper he describes a collection of bones obtained from the dry, sandy burying-places of the Peruvian "Indians," near the Inca Temple of Pachacamac, some distance from the modern Lima. Amongst these bones were several that bore exostoses close to the epiphysal lines. Professor Virchow was able to prove that a femur, a tibia, a humerus, and a fibula, each of which bore spongy exostoses of various sizes and shapes, all belonged to the same individual. The position of the exostoses and their appearance were precisely the same as those seen nowadays in Europeans; in the Inca, as in the European, their origin was obviously developmental in relation to the epiphysal cartilages. This existence of multiple exostoses due to developmental abnormalities in Incas would seem to indicate that these ancient Peruvians—entirely separated as they were from other continents—were liable to precisely the same developmental tumours as those we see to-day; what we should like to know is whether they were also subject to carcinoma and sarcoma. The question is impossible of solution as regards carcinoma, for soft parts have all disappeared and only bony tissues remain; sarcoma, however, might still be found in connection with an Inca's bones—the remains of an osteo-sarcoma of the tibia, for example, could scarcely be mistaken for anything else. Few of us will ever have an opportunity of searching for the remains of a sarcoma upon an Inca skeleton, but it is just possible that somebody who reads these lines might be able to do so. The discovery of such an Inca sarcoma would, we think, go a considerable way towards proving that sarcoma, at any rate, is of developmental, and not microbial, origin.

ANNOTATIONS.

Iron as a Constituent of Food.

MUCH discussion has taken place regarding the manner in which iron produces its therapeutic effects in the treatment of chlorosis. There are many difficulties in the way of believing that it is directly absorbed from the intestine, and, in addition, there is ground for the suggestion that the essential flaw in cases of chlorosis is not the absence of iron from the food supply, but an imperfect capacity for absorption by the blood-vessels of the intestinal mucous membrane. Based upon this latter contention is the view that inorganic iron cures chlorosis by improving the function of intestinal absorption and so permitting the inorganic iron present in various foodstuffs to reach the blood-stream. Whether this is the case or not, it is reasonable to remember that in the treatment of chlorosis such foods ought to have a prominent place. In any event they must materially contribute to the patient's progress. Dr. James J. Walsh has lately laid stress on this point, and he insists particularly on the value of red meats. Dr. Walsh claims that "the gravy from roast beef is nearly as effective as any iron preparation in the relief of the anæmia, and consequently also of the heart discomfort accompanying it." In addition, however, to red meat, many vegetables, it must be remembered, are able to contribute valuable proportions of iron to the dietary scheme. This is particularly true of the beet, yellow turnip, tomato, spinach, and green lettuce. These, therefore, are to be prescribed for chlorotic patients, and this not as mere occasional dietetic experiences, but daily, and even at several meals on each day. When this practice is adopted the practitioner need not be agitated by the controversy of organic *versus* inorganic iron. If with such a line of treatment he enforces abundance of rest and the cultivation of early hours, and prescribes so well established a remedy as Bland's pills, he needs only perseverance to cure his cases of chlorosis. One other caution; let it be seen that the pills are freshly prepared and not the insoluble spheres which are turned out at a cheap price to cater for those who practise a false economy.

Intubation of the Larynx in Diphtheria.

DR. CLAUDE B. KER, of the Edinburgh City Hospital, has recently made an interesting contribution on the value of intubation in cases of laryngeal diphtheria. This method of treatment excited much interest when first introduced, but it hardly appears to have received anything like a general practical recognition. Dr. Ker now tells us that since 1894 it has been the operation of election at the hospital with which he is associated, and his conclusions are based on an experience of 200 cases. Until three years ago the mortality of the operation never fell below 40 per cent., a figure which is practically identical with the death rate in laryngeal cases at hospitals where tracheotomy is in vogue. In recent years, however, Dr. Ker can record a great improvement on these results, and he notes that this coincides with the systematic adoption of nasal feeding in all cases of intubation. He now depends, in these

cases, solely and entirely on nasal feeding. Another modification which he has found desirable is the substitution of vulcanite for the old metal tubes. In hospital practice he is convinced that it is to the advantage of the patient to postpone operation as long as possible, and in most of his cases intubation was adopted only when the patient was becoming exhausted and the pulse was beginning to fail. This postponement gives the serum time to take effect, and it is quite safe when skilled assistance is continuously at hand. The conditions, however, are different in private practice, and here earlier operation is advisable, or even necessary. At the same time it is right to recognise that even with tolerably severe laryngeal paroxysms the patient may recover without operation. But this fact, though of great importance in hospital practice, is of little avail to the private practitioner. With definitely laryngeal symptoms the latter can hardly leave his patient without some interference, and hence tracheotomy is performed, and rightly, in cases which, in hospital, might be safely left alone. Dr. Ker's advice in these circumstances is to intubate as soon as laryngeal diphtheria is recognised, unless the obstruction is very marked, when tracheotomy is certainly the safer method.

Waste in Convalescent Homes.

THERE can be no doubt that, as at present conducted, many convalescent homes fail to fulfil the purposes for which they are intended in the modern scheme of treatment of disease. Far too many cases are admitted who may not be physically ill. They consist of members of the community whose means are not large, who have run down in the course of the year's work, who will benefit by change and country air, and who obtain a letter from a convalescent home as the readiest and cheapest means of taking a rest in the country. The Convalescent Homes Association is making a valiant effort to bring the hospitals and convalescent homes more closely together, with the object of enabling an increasing number of beds at small additional expense to be made available for patients sent from a hospital who require more surgical attention than is generally afforded at present by convalescent homes. There is every reason why the managers of convalescent homes should welcome this movement, and why they should heartily co-operate to promote the supply of new surgical beds at existing convalescent homes. The movement has been checked by a lack in the supply of patients from the hospitals to the special surgical beds now available in convalescent homes. This, we understand, is due to a defect in the regulations which provide for the admission of such cases on one particular day in each week. To be effective for hospital purposes all such beds, when vacant, must be available for the receipt of patients on any day in the week. We are glad to hear that this difficulty will shortly be overcome, and that there is every prospect that the work of the Convalescent Homes Association will steadily develop to the utmost the inter-relations which ought to exist between hospitals and convalescent institutions.

MEDICAL OPINION AND MOVEMENT.

It has been held hitherto that, owing to the bactericidal action of the blood serum, it is not generally possible to cultivate the typhoid bacillus from the blood of a patient, such as is taken in the ordinary way for a Widal reaction. According, however, to the latest experiments, this appears to be not so difficult a matter. In a research carried out in the Hygienic Institute in Kiel, typhoid or paratyphoid bacilli were found in the clotted blood sent for Widal's reaction in eight out of eleven examinations. These examinations were made by Dr. R. Müller and Dr. H. Graf, and similar results have since been obtained by other observers. Dr. Fornet has succeeded in cultivating the organisms fourteen times out of nineteen examinations of these blood clots in capillary tubes. He adopted the method of incubating the clots in test-tubes containing sterilised ox-bile. The suggestion is that the bile dissolves the clot and so liberates the organism. By this means the diagnosis of typhoid may be established in the first few days of the disease, when the Widal reaction is slight or altogether negative. It is just in these early days that such a test is of the greatest assistance to the clinician.

MANY efforts are now being made to improve the sanitary conditions in Ireland and to rouse the people to a sense of the importance of questions of public health for their well-being and prosperity. The latest endeavour on these lines is the Women's National Health Association of Ireland, which has been organised by the Countess of Aberdeen. The objects of this Association are (1) to arouse public opinion, and especially that of the women of Ireland, to a sense of responsibility regarding the public health; (2) to spread the knowledge of what may be done in every home and by every householder to guard against disease and to eradicate it when it appears; (3) to promote the upbringing of a healthy and vigorous race. The problems which immediately demand the attention of the Association are those affecting the prevention of consumption, the reduction in infant mortality, the provision of a pure supply of milk, the medical inspection of children in the elementary schools, the teaching of the principles of health to the children in school, and the improvement in school sanitation. Her Excellency the Countess of Aberdeen is President and Honorary Treasurer, and Mrs. Rushton is the Organising Secretary in Dublin. Branches are to be formed in different parts of Ireland. We wish every success to such an excellent movement, and hope it may bear good fruits in the immediate future.

ONE of the most harassing elements in the life of a general practitioner is the fact that he is always "on duty." Even the Sunday rest is often denied to him, and the cherished hope of repose after a week of incessant work and worry proves delusive, and the new week has to be faced unrefreshed and unrested. On the Continent efforts are being made to ensure more leisure time on Sunday to the medical man. At the recent Con-

gress of Medical Practitioners in Paris the question was debated, and a resolution was passed in favour of charging double fees for Sunday visits. Since then Dr. Ravon, of St.-Etienne, has dealt with the subject, and is of opinion that the public require educating on the question, and that they should be charged at the rate of night visits after midday on Sundays and holidays. There seems no reason why medical men in this country should not also take the matter in hand, and make it known to the public that they also require a day of rest, and expect to be left in peace except in so far as cases of urgent necessity may arise. Most medical men will probably agree with Dr. Ravon's computation that only about 25 per cent. of the visits requested by patients on Sundays are really necessary. The idea that a medical man requires a Sunday rest simply does not occur to the majority of people, and so Sunday afternoon appears to be a convenient time, with both parents at home, to discuss the ailments of any member of the family with the doctor. The visit would probably not appear so desirable if it was known that a double fee would be charged.

DR. ROBERT SAUNDBY, Professor of Medicine in the University of Birmingham, has recently discussed in an interesting paper that somewhat rare condition known as splenomegalic polycythæmia. The disease is characterised by a progressive asthenia, accompanied by high blood pressure, general redness or cyanosis of the skin, splenic enlargement, and considerable increase in the number of red corpuscles, with a proportional rise in the hæmoglobin content, the specific gravity, and the viscosity of the blood, but without any increase in the number of white cells. Dr. Saundby gives details of two cases which have come under his observation in the Birmingham Hospital, one of which has already been published by Dr. Russell in 1902. He then proceeds to discuss the etiology. Contrary to most other observers, who have placed the primary lesion in the bone marrow and regard the polycythæmia as the essential factor of the disease, Dr. Saundby is inclined to the view that this increase in red corpuscles is of a compensatory nature and secondary to the stagnation in the capillary circulation resulting from a contraction of the middle-sized arteries and arterioles. In support of this view he points to the increase of red corpuscles which may occur in cases of congenital heart diseases and other conditions of deficient oxygenation of the blood. He puts forward, therefore, the somewhat ingenious theory that in this disease the primary lesion consists in a nervous vasomotor spasm caused by some toxin, possibly influenzal in origin. This continual spasm leads to pronounced thickening of the arterial walls, with engorgement of the capillary and venous circulation and congestion of the internal organs; and this vascular stagnation and general asphyxial condition call forth increased activity of the bone marrow and consequent polycythæmia, which in turn further impedes the capillary circulation.

HOSPITAL CLINICS.

BRAIN ABSCESS.

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(A Lecture delivered at the National Hospital for the Paralysed and Epileptic, Queen Square.)

A SECONDARY NOT A PRIMARY DISEASE.

THIS afternoon we will discuss the subject of abscess of the brain. Abscess of the brain is a secondary and not a primary disease. In almost all cases it occurs as a complication of one or other of four conditions; these are (1) injury of the head; (2) local cranial suppuration; (3) certain general infections; (4) certain local suppurations other than those of the head. When secondary to head injury a brain abscess is not, as a rule, deeply-seated, but is a meningo-cortical abscess. The abscess wall is formed by the meninges and the superficial layers of the brain substance which have participated in the suppurative inflammation. The specimens on the table illustrate this condition—superficially placed brain abscess secondary to injury of skull. The instrument causing the injury might have penetrated deeply into the brain substance carrying infection with it like a stab-culture, then a deep-seated abscess would have resulted. More than half of all brain abscesses are due to the second of the causes I have named—local suppuration in the skull. The local cranial suppurations which determine brain abscess are either in the temporal bone or in the cavities connected with the nose. The site of infection of the brain substance from local cranial suppuration is, commonly, at the point where the brain tissue is most closely approximated to, or most intimately connected with, the suppurative focus in the bone. In temporal bone (ear) suppuration the parts of the brain nearest the temporal bone, the temporosphenoidal lobe and the cerebellum, are those most frequently affected.

FREQUENCY OF SITUATION.

The cerebellar hemisphere lies behind the posterior surface of the petrous bone, and the temporosphenoidal lobe is close against the roof of the tympanum; thus it is easy to understand why these regions are so frequently infected from suppuration in the temporal bone. Brain abscess is much more likely to result from chronic than from acute local suppuration. Intra-cranial infection from an acute condition determines acute meningitis rather than brain abscess, because the sub-arachnoid space is then infected before limiting protective adhesions have had time to form. In chronic suppuration infection only slowly reaches the interior of the skull, protective adhesions form before the dura is traversed, and the infection, making its way through the fused meninges, reaches the brain substance without entering the general cavity of the arachnoid or the sub-arachnoid space. The highly vascular cortex, with abundant connective tissue corpuscles, offers considerable resistance to the spread of infection, and does not commonly undergo

extensive destruction. Where it is traversed by the infective material a barrier of fibrous tissue is thrown out limiting the destructive process to the formation of a narrow track. The white matter is much less resistant and is, therefore, much more extensively destroyed. In this way the abscess assumes a pear-shaped form connected by a narrow portion or "stalk" of greater or less length with the diseased bone.

CONDITIONS FAVOURABLE TO MANIFESTATION OF BRAIN ABSCESS.

The general infections most liable to be complicated with abscess of the brain are (a) pyæmia, (b) tubercle, and (c) certain specific fevers, such as influenza, enteric fever, and variola.

Brain abscess is a rare manifestation of general pyæmia, and when it does occur is usually on the left side of the brain. I shall refer later on to brain abscess complicating influenza.

The local suppurations elsewhere than in the skull which occasionally become complicated with brain abscess are caries of rib, empyæma, bronchiectasis, and gangrene of lung. That these suppurations in the chest do directly cause infection of the brain substance is proved by the fact that in some such cases lung pigment has been found in the pus of the brain abscess. The moment when infection reaches the brain is not commonly marked by any recognisable local symptom, and the course of brain abscess varies within wide limits.

CLINICAL TYPES.

Five types of clinical evolution may be described.

1. Sub-acute evolution more or less distinctly divided into three stages: (a) The initial febrile stage; (b) the stage of remission; and (c) the paralytic stage. 2. Evolution with severe general infection. 3. Evolution with complete latency until the final attack of coma. 4. Evolution just like that of brain tumour. 5. The remittent type of evolution.

I. The sub-acute type is that we so often see in brain abscess secondary to ear disease or, less frequently, to disease in the accessory cavities of the nose. It generally lasts about three weeks, but sometimes longer. The initial symptoms are acute; the face is flushed, the temperature rises sharply, there is severe headache and vomiting; the patient is obviously ill. An acute specific fever seems a likely enough explanation of the symptoms, but attentive examination leads to the discovery of local cranial suppuration, and we should at once suspect brain abscess. This acute stage with severe headache is of variable, but usually of short, duration. At the end of three days, or thereabouts, the case passes into the second stage, that of remission, the

temperature falls, and the headache greatly diminishes in intensity; the patient no longer calls out with severe pain in the head, but his mental state is dull. The disease has produced increase of the intracranial pressure; this has dulled sensation, and so the severity of the symptoms has passed away. On this condition the third or paralytic stage supervenes, usually suddenly. There is then manifest motor weakness, the muscles affected naturally varying with the site of the abscess; for instance, in abscess of the cerebellar hemisphere the muscular weakness will be most decided in the homo-lateral upper limb, and in those of the contra-lateral limbs in abscess of the temporo-sphenoidal lobe.

II. The second type of clinical evolution is exceedingly fatal. The onset is hyperacute, there is high fever, rapid pulse, often wild delirium. It is often quite impossible, with our present knowledge, to make a diagnosis of brain abscess from the symptoms present, and some cases of brain abscess with severe general symptoms have been taken for a malignant form of some acute specific fever, or the disease known as acute delirious mania.

III. In the third type of evolution there are practically no symptoms until the final stage; in this the patient suddenly becomes comatose and dies instantly or in a few hours. Many such cases are on record. Perhaps, in some, diagnosis is impossible, but it should always be remembered that symptoms not present and symptoms not observed are not synonymous terms, and in many of the recorded cases there is no evidence that the patient had been under skilled observation before the onset of coma. Some of the manifestations of gross disease of the brain cause the patient but little inconvenience, and are only to be elicited by an attentive clinical examination, and in some, at least, of the cases of "complete latency," it seems probable that such an examination would have revealed some symptom or symptoms from which a diagnosis might have been made.

IV. In the fourth type the clinical evolution is like that of brain tumour. The abscess is chronic and the onset of symptoms is gradual; just like those caused by any other slowly increasing growth in the brain. Headache, at first slight and occasional, later more severe and more constant, vomiting, and optic neuritis, are the general symptoms of such an abscess, to which after a few weeks the "focal" symptoms indicating the site of the abscess are gradually added. The abscess, in fact, causes just the same symptoms as a tumour of the same size, in the same situation, and growing at the same rate would cause.

V. The fifth, the remittent type, is very important. The patient has an acute illness of which all the symptoms subside, but at the end of two or three months or so they recur suddenly, and in a few days the patient may be dead. All cases of this type that I have seen have been influenzal, and I cannot but think that many cases of influenzal brain abscess have been unrecognised. The late Dr. Bristowe first described these cases. Each of his two patients had had influenza, during an epidemic, with high fever, very severe headache and great subsequent

prostration; both, except that the headache in some degree persisted, got quite well, but after two or three months each of them became acutely and suddenly ill with severe headache and vomiting, and died within a few days. On post-mortem examination an encapsulated abscess about the size of an egg and filled with green pus was found in the brain in each case. In neither case was there aural or nasal or other local cranial suppuration, so that the abscesses must have been due to direct infection of the brain substance carried by the blood-stream. In one case the abscess was in the fronto-parietal, and in the other in the occipito-sphenoidal, region. Many years ago a somewhat similar case following influenza was in this hospital under the care of Dr. Taylor. Three or four months before admission the patient had a very severe attack of influenza during which some weakness of the left side of the body was observed. This paresis was entirely recovered from and was not present on admission. He had never been really well since the influenzal attack and complained much of occipital headache. Optic neuritis was well marked on admission, his temperature was 103, and there was urgent vomiting. The same evening he became comatose, and I was sent for between 9 and 10 P.M. to operate. Respiration had ceased before I arrived and artificial respiration was maintained. I consulted with Dr. Taylor as to the plan of operation. In the afternoon it had been thought that the symptoms pointed to an encapsulated cerebellar abscess. The left-sided weakness might have been due to a lesion in the homo-lateral cerebellar hemisphere or to one in the contra-lateral cerebral hemisphere, and no indications were at the time available for determining this point. As an operation in the cerebellar region would, during the performance of artificial respiration, be of great difficulty, I determined to expose the right motor region. I removed a piece of bone about four inches square, the brain bulged through the opening for about an inch, showing that it was under great pressure. Natural respiration did not, as we had hoped, return. A trocar and cannula was plunged up to the hilt into the brain and impinged upon a hard mass into which it would not penetrate. I felt sure that this was a tumour in an inaccessible part of the brain, and, therefore, abandoned the operation. Death occurred directly the artificial respiration was discontinued. The post-mortem examination revealed an encapsulated abscess containing an ounce of thick pus in the situation of the optic thalamus, the capsule was very dense and about a quarter of an inch thick. At the present day an incision would be made in the cortex, the finger passed in, and such an abscess, or tumour, enucleated.

GENERAL SYMPTOMS.

Of the symptoms to which brain abscess gives rise some indicate the presence of an intra-cranial lesion, but give no information as to its site, while others indicate a lesion of a particular part of the brain; we therefore speak of general cerebral symptoms and localising or focal cerebral symptoms. The first group, the general symptom-complex, or syndrome, is due in the main to increased intra-

cranial pressure. The symptoms in this group are headache, vomiting, optic neuritis, slow pulse, slow respiration. From these symptoms alone, no localisation diagnosis can be made. Pain, even when referred constantly to a particular spot, does not indicate the site of the lesion. Persistent localised pain, however, when associated with persistent localised tenderness is of some localising value. Optic neuritis is often more intense or is observed earlier on the side of the lesion.

The localising or focal symptoms are due to irritation of, or suppression of function of, a particular part of the brain. For their correct interpretation a considerable knowledge of cerebral physiology is required, and several lectures would be needed for their complete discussion—a few only can now be considered.

LOCALISING SYMPTOMS.

The localising symptoms are of two kinds: (a) Abnormal motor phenomena, and (b) abnormal sensory phenomena. I will give you a few illustrations of the association of such symptoms as observed in abscess of particular parts of the brain.

Abscess in Cerebellar Hemisphere.—In some, though not all, cases of abscess in the cerebellar hemisphere, the patient assumes a "forced position" in bed. He lies curled up on one side with the elbows and knees flexed and the side of the face corresponding to that of the lesion uppermost. I have seen this attitude adopted in two or three cases of cerebellar tumour; the same position is assumed in experimental ablation of the cerebellar hemisphere, and has been observed in some cases of tumour. Deviation of eyes: Usually conjugate deviation of both eyes away from the side of the lesion, but sometimes skew deviation with divergent optic axes. Lateral nystagmus, most marked when the patient looks towards the side of the lesion. A very characteristic symptom of lesion of the cerebellar hemisphere, abscess or tumour, is weakness and loss of tone of the muscles of the homo-lateral limbs, the upper limb especially.

I once operated upon a case diagnosed as left cerebellar tumour; no tumour was found, but the cerebellum bulged through the opening in the dura under very great pressure. So great was the intracranial pressure that most of the cerebellar hemisphere continued to protrude and ultimately sloughed off. For many months the upper limb on the same side was almost paralysed. The patient lived some eighteen months, and then died after a short illness; at the post-mortem a tumour was found in the right frontal lobe. It is sometimes difficult to distinguish a frontal lobe tumour from a cerebellar tumour.

When we have reason to suspect an abscess in the cerebellar hemisphere and we find decided weakness in the arm on the same side, this symptom is pathognomonic, and operation should be done at once. In some few cases rigidity and spasm have also been observed on the homo-lateral side. A case of cerebellar abscess was reported some years ago by Deansley (of Wolverhampton) in which there was paralysis of both arm and leg on the side of the

lesion. The knee-jerks may be either diminished or exaggerated; it is not uncommon to find the knee-jerk exaggerated on the homo-lateral side. In some cases of cerebellar abscess the curious phenomenon known as forced rotation is present. In lesions of the cerebellar hemisphere the rotation is round a vertical axis away from the lesion. In lesions of the vermis rotation is round a horizontal axis, as shown in Pagano's experiments. In a case of right-sided cerebellar abscess that I saw some years ago the patient had a tendency to rotate away from the side of the lesion and to fall towards the side of the lesion. He came to the hospital in the fifth week of the disease and was still able to walk, though with considerable difficulty, always tending to fall towards the side of the lesion. Mills, of Philadelphia, an eminent neurologist, says that in these cases the tendency to fall is invariably towards the side of the lesion. I do not know that this rule is absolute, but Dr. Mills is so great an authority that one does not care to contradict him. Lesions of the cerebellum cause no sensory phenomena, all forms of sensation remain intact. But abscess of the cerebellum is often associated with deafness; the deafness is due, not to the cerebellar abscess, but to the disease in the temporal bone; it is deafness from destruction of the peripheral sense organ, and is, therefore, on the side of the lesion. The syndrome symptoms in cerebellar abscess present peculiarities which are worthy of mention, as they are often of diagnostic value. Optic neuritis occurs early, and is manifest in the eye on the same side as the abscess, earlier than it is in the eye on the opposite side, so that optic neuritis limited to, or more advanced in, one eye is probably diagnostic of the side of the lesion. Vomiting is urgent and vertigo intense, much more so than in similar lesions of the cerebrum.

Temporo-sphenoidal Abscess.—Let us now consider, in the same way, the symptoms of abscess of the temporo-sphenoidal lobe. The abnormal motor phenomena are (1) paralysis of the third nerve, on the side of the lesion, from direct pressure; it is first manifested by immobility of the pupil, though it may go on to paralysis of the oculo-motor muscles supplied by the third nerve. With ear disease and the general symptom of cerebral abscess a stable pupil on the side of the lesion is diagnostic of abscess in the temporo-sphenoidal lobe. (2) More or less complete hemiplegia. This is on the side opposite to the lesion and is due to the abscess extending to, and destroying the motor cortex, or pressing on the internal capsule. The march of the paralysis differs in the two cases: in the internal capsule type of hemiplegia the leg is first affected, then the arm, and lastly the face; when the hemiplegia is due to gradual extension of the abscess up the cortex, the face is first affected, then the arm, and lastly the leg. Thus the patient, when first seen, may have slight weakness of the opposite side of the face, next day the arm may be weak, and a little later the leg, or the onset may be in the reverse order. (3) Exaltation of the deep reflexes on the contra-lateral side.

The abnormal sensory phenomena are: (1) Deafness of the opposite side from extension of the abscess to the cortical centre for hearing which, as Ferrier long ago demonstrated, is located in the

superior temporo-sphenoidal convolution. It should be remembered that the disease of the temporal bone may destroy the organ of hearing and so cause deafness on the side of the lesion, and that the cortical centre for hearing, though frequently, is not necessarily involved in a temporo-sphenoidal abscess, so that with a temporo-sphenoidal abscess there may be deafness on the homo-lateral, on the contra-lateral, or on both sides, but the deafness caused directly by a temporo-sphenoidal abscess is always contra-lateral.

2. The cortical centres for taste and smell are sometimes affected in temporo-sphenoidal abscess.

3. More or less complete anæsthesia on the contra-lateral side when the abscess has extended towards the internal capsule, or only some loss of the power of localising light touches and loss of muscular sense when the cortex only is affected.

4. In abscess of the left temporo-sphenoidal lobe in right-handed individuals, or of the right in left-handed individuals, speech defects are due to disturbance of the cortical centres concerned in articulate speech. These important symptoms make the diagnosis of left-sided temporo-sphenoidal abscess much easier than that of a similar abscess on the right side. I have met with many cases of temporo-sphenoidal abscess in which aphasia was present. One such case was in St. Thomas's Hospital fifteen years ago. He had left ear disease, but did not seem gravely ill, though he complained of persistent headache. Two or three days after his admission the sister told me that he had been asking her during the morning to boil a sixpence; from that I knew that he had aphasia, and that consequently the temporo-sphenoidal lobe was involved. It was ascertained upon inquiry that the patient had been in the habit of giving his wife sixpence with which to buy eggs. A large temporo-sphenoidal abscess was evacuated the same day.

5. Another important sensory phenomenon of temporo-sphenoidal abscess, whether left or right, is the peculiar mental condition now described by Dr. Hughlings Jackson as the "dream state," and by Sir Wm. MacEwen as the "somnambulistic state." In it the patient is drowsy and apparently unconscious of his surroundings, and the eyes seem

staring into vacancy. The phenomenon is especially characteristic of abscess of the anterior part of the temporo-sphenoidal lobe.

Frontal lobe Abscess.—I will now say a few words to you about abscess of the frontal lobe. The danger attending chronic aural suppuration is now fairly generally appreciated by the profession, but the equally great danger of chronic nasal suppuration seems less clearly understood. Many preventable deaths from intra-cranial infection still result from chronic nasal suppuration. Obviously chronic nasal suppuration ought to be as thoroughly dealt with as aural suppuration. When this disease gives rise to intra-cranial infection it is usually by way of the frontal sinus. Meningitis, or brain abscess, may result. Frontal lobe abscess has usually an insidious course. It is not uncommon to find a thick-walled encapsulated abscess in the frontal region.

The symptoms met with in frontal lobe abscess are alteration, especially deterioration, of mental character, incontinence of urine, and deviation of head and eyes from irritation or destruction of the centre for movement of head and eyes in the second and third frontal convolutions. On the left side these centres are situated between, and in advance of, Broca's speech-centre in the third, and Charcot's motor graphic centres in the second, frontal convolution.

In an abscess extending backwards there would be symptoms due to interference with the motor centres in the ascending frontal convolution, and on the left side, also, with the speech centres.

THE TREATMENT.

The treatment of cerebral abscess is complete evacuation and drainage. Whenever possible, the abscess should be opened and drained through its "stalk," that is through that part which is connected directly with the focus of bone suppuration to which the abscess owes its origin. The local bone disease should be first removed and the operation continued by following its track right into the abscess. This method is far preferable to that which was formerly practised. In certain urgent circumstances, such as arrest of respiration, the old plan in which the abscess is opened through healthy cortex and meninges is still necessary.

POWERS OF ENTRY UNDER THE PUBLIC HEALTH (LONDON) ACT.

MR. FLOWDEN, the Marylebone magistrate, is facetious. He must have his joke, and, indeed, no one will grudge his habit of enlivening the dreary proceedings of the police court by the sparkle of his wit. That "the law is a hass," as was affirmed by Mr. Bumble, is a statement apparently endorsed by the mirthful magistrate. At all events, it has been left to Mr. Plowden to discover that the power of entry under the Public Health (London) Act is distinct from the power of egress, and that no power of exit is granted under the Act. On account of this ludicrous failure of the law, the Stipendiary Magistrate was unable to grant a warrant to empower the

officials of the Marylebone Borough Council to enter a house in their borough for the purpose of removing the dust which had been accumulating there for several months past. The occupying tenants severally objected to the dust being carried through their respective tenements, and the magistrate, unable to grant a warrant empowering egress as well as entry, endeavoured to console the defeated officials of the Council with an expression of opinion that the first to suffer in health from the insanitary conditions would be the objecting parties themselves. Truly magisterial law is a wonderful instrument of public health administration.

CLINICAL POINTS.

PYREXIA IN UNCOMPLICATED CIRRHOSIS OF THE LIVER.

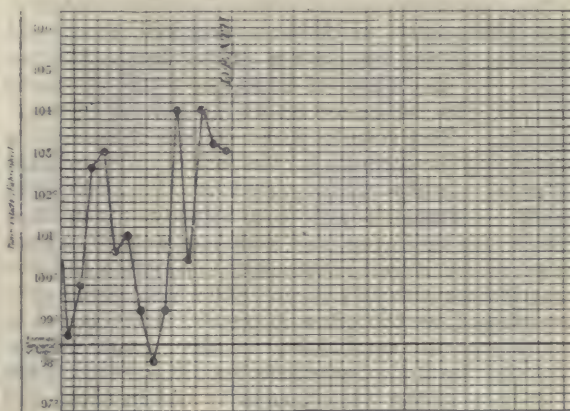
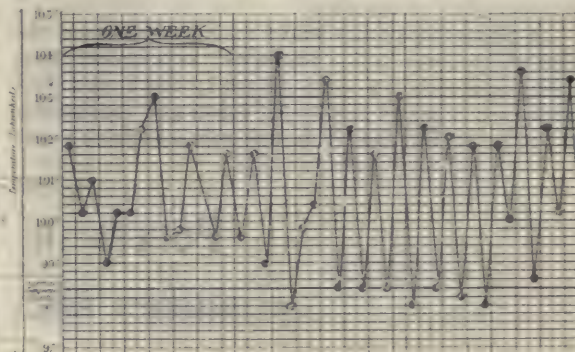
Any patient who has cirrhosis of the liver is liable to intercurrent inflammatory troubles which may cause pyrexia. There may be acute pleurisy, for example; or phthisis, lobar pneumonia, general tuberculosis, an abscess or abscesses in the subcutaneous tissues or elsewhere, and so on. It is not of cases in which there is an additional and often obvious cause for pyrexia that we are speaking just now, but of cases in which the cirrhosis is proved by autopsy to have been the only gross pathological change in the body.

Carrington believed that if the temperature were recorded throughout the disease, there would be few patients with uncomplicated cirrhosis of the liver who would not at one time or another exhibit pyrexia. In the early stages microscopical sections of the liver show widespread infiltration of the portal areas with small round cells; even in the later stages the cirrhotic changes indicate a persistently recurring inflammation of low type. If this be so, it would almost be expected that at least during the exacerbations of the intrahepatic inflammation there would be pyrexia. It is of considerable clinical value to know that moderate pyrexia is not only compatible with a diagnosis of uncomplicated cirrhosis of the liver, but sometimes even helps to confirm it. In alcoholic subjects pyrexial attacks which seem to have no cause are by no means uncommon; in such cases the possibility of hepatic cirrhosis must not be overlooked.

The pyrexia in typical cases is not extreme; the temperature may be about 100° F. every evening, and 98° F. every morning; as a rule the rise is to about the same height night after night, whilst there is seldom any drop far below normal in the morning. Sometimes, however, the pyrexia may be less regular, may reach much higher levels than 100° F., and need not always return to normal in the morning. Occasionally, so high a figure as 104° F. may be touched, without any rigor. The following is an example of one of these extreme pyrexial cases:—

A female patient, aged 42, came under observation when she had been out of health for four months. She was a married woman, with a good family history, and had suffered from no previous illness of importance. She had had one miscarriage, but no children. Her occupation was house-work. She had been in the habit of drinking ale in moderate quantity, but said that she never took spirits. Four months before she was seen she began to feel weak, to vomit constantly after her meals, to suffer from profuse diarrhoea, and at night from burning sensations in the soles of her feet, and to perspire a great deal. She began to lose flesh rapidly. The vomiting gradually increased in severity, particularly before breakfast in the morning, though she was also liable to it throughout the day after meals. She never suffered from hæmatemesis, and there was no abdominal swelling nor pain, and little nausea. The diarrhoea increased to

the extent of from five to seven evacuations of liquid and offensive stools a day. There was slight œdema of the ankles and feet after she had been standing for an hour or so after getting up in the morning. She was anæmic, with a slightly yellow tinge in the skin, but without any jaundice of the conjunctivæ, and without bile pigments in the urine. She looked worn and ill, and by the time she came under observation she was glad to remain in bed, where she rested comfortably at full length. The liver was felt, firm but smooth, two inches below the costal margin, and it was slightly tender. The spleen was not felt. The cardiac and pulmonary



physical signs were normal except that there was evidence of emphysema. There was a slight cough but no expectoration. The respirations were 29 per minute, and the pulse, which was small and weak, had a rate of 110 per minute. The urine was high-coloured, but had a specific gravity of only 1010; it contained neither albumen, sugar, nor bile pigment. The patient was irritable, but her mental faculties were good; there was no definite evidence of any peripheral neuritis, unless the pains in the soles of the feet at night were due to this; the knee-jerks were apparently normal. The tongue and fauces were dry; the former was covered by a slight white fur, and there were extensive sordes on the lips and teeth. The diagnosis was by no means obvious, but among other things cirrhosis of the liver was suspected, and this was confirmed later

by autopsy. From our present point of view the pyrexia was the main thing to attract attention; the patient was seen daily for four weeks before her death, and the illustration given is her temperature chart.

Before she died her liver increased in size, reaching nearly to the umbilicus towards the end. The patient herself changed but little, except that she gradually declined; three days before her death the vomiting became much worse, the pulse-rate rose to 124, and she became semi-comatose. At this time the urine was very scanty and high coloured, with a specific gravity of 1020; it was still free from albumen, blood, sugar, and bile, but contained very large quantities of indican. Complete coma set in upon the last day, and in this coma she died. The duration of the illness from the day she began to complain until the day she died was exactly five months.

At the autopsy the brain and its meninges, the pleura, pericardium, pancreas, suprarenal capsules, and kidneys were natural; the lungs were emphysematous in the upper lobes and oedematous in the lower, but free from tubercle and from pneu-

monia; the heart muscle was flabby; and the stomach and intestines were congested and coated internally with mucus. The main pathological changes were in the spleen and liver. The former, though not felt during life, was moderately enlarged (8 ounces), as is almost the rule in cirrhosis of the liver. The latter was very large, hard, and smooth, weighing 72 ounces, tough, and of a pale yellow colour. It was a typical example of a unilobular cirrhotic liver, and in microscopical sections there was an enormous degree of nuclear proliferation of the portal connective tissue cells, and much fatty change in the cells of the liver substance, which probably accounts for the patient dying of cholæmia in this early stage of the disease. If the patient had recovered for the time being it is very probable that the diagnosis of the cause of the pyrexia would have remained obscure; similar cases in alcoholic subjects are constantly coming before one; we must remember that a possible, and not uncommon, cause for such pyrexia is cirrhosis of the liver, and that with cirrhosis of the liver pyrexia is likely to occur at some stage of the disease, even in the absence of any complication.

POINTS IN TREATMENT.

PLUMMER'S PILL: ITS INSOLUBILITY.

SOME interesting experiments have been made in the laboratories of Messrs. Southall Bros. and Barclay, at the instigation of Sir James Sawyer, upon the solubility of Plummer's pill as made according to the directions of the British Pharmacopœia. The results point to the necessity for modifying the formula for the pill, in order to make it more readily disintegrated in the alimentary canal. Plummer's pill is a remedy which is so frequently employed, and with such benefit in some cases, that it is well worth while trying to make sure that it does not pass through the body completely unchanged, as too often happens. It is useful in many nervous conditions, whether functional or organic; in those indefinite conditions which are popularly called "biliousness"; and in those still more indefinite cases in which that obscure effect is desired to which the term "alterative" is applied.

Plummer's pill, which is also called compound calomel pill, or the *pilula hydrargyri subchloridi composita* of the British Pharmacopœia, is made from calomel, sulphurated antimony, guaiacum resin, castor oil, and alcohol (90 per cent.). It contains 1 grain of calomel, 1 grain of sulphurated antimony, and 2 grains of guaiacum resin in 4½ grains.

Various samples of the pill, some fresh, some old, some coated, and some uncoated, were all examined under the same conditions by treatment with water for 48 hours with frequent agitation, the water being maintained at a temperature of 38° C., i.e., about body temperature. In almost all cases the pills were just the same at the end of the experiment as at the beginning; in only a few instances did any disin-

tegration of the pill occur, notwithstanding the fact that the submersion and agitation in warm water extended over a much longer period than would be the case in the alimentary canal. It is true that the hydrochloric acid in the gastric juice, and the alkali in the intestinal juices, acting successively upon the pill, might be thought likely to accelerate the disintegration; but that this is often not the case is shown by finding the pills unaltered in the stools.

The fault lies, not in the calomel nor in the sulphurated antimony, but in the guaiacum resin, castor oil, and alcohol; the interaction of these three substances seems to lead to the production of a very tenacious and insoluble product, and it is the latter which prevents the disintegration of the pill. Experiments were carried out to find a remedy for this. Sir James Sawyer points out that omission of the castor oil, as proposed by the Committee of Reference in Pharmacy, does not correct the defect. Pills made according to the pharmacopœial formula, but leaving out the castor oil, show little or no improvement in their power of disintegration when agitated in water at body temperature for two days. The oil may well be left out, but it is necessary to leave out the spirit also. Sir James Sawyer has proposed a formula for the pill in which *syrupus glucosi* is the only excipient. The prescription may be written with syrup of glucose in the place of the castor oil and the alcohol of the official formula; the result is a good pill, which disintegrates rapidly in water at body temperature, does not pass unaltered in the stools, and is likely, therefore, to be of much greater service as a therapeutic agent than is the usual Plummer's pill.

THE GENERAL PRACTITIONERS' COLUMN.

PERIODIC BRONCHITIS IN CHILDREN.

By JOHN ALLAN, M.B., Ch.B.Edin.

THE ailments of children, many of them of trifling import, form a considerable proportion of the cases which a general practitioner is called upon to treat. What I have termed periodic bronchitis in children is not infrequently met with, and though the condition is not serious, it gives rise to much annoyance to both children and parents, and it requires prolonged and careful treatment. In some instances a specialist may be required to perform an operation, but the onus of carrying out the after-treatment and of bringing about a cure rests entirely with the family medical attendant.

As the name implies, the attacks of bronchitis occur periodically, sometimes at intervals of three or four weeks, perhaps not quite so often. The child feels out of sorts and appears to have a bad cold. There are generally loss of appetite, distaste for food, cough, and constipation. The temperature may or may not be raised, but the rise practically never amounts to more than $\frac{1}{2}^{\circ}$ F. The physical signs in the chest consist merely of some general rhonchi.

As regards etiology, in about 95 per cent. of cases the condition will be found associated with enlarged tonsils and adenoids. A few cases seem to be of the nature of asthmatic attacks, and to treat these is less satisfactory. In many cases rickets is a predisposing cause.

Coming next to treatment, we find that hypertrophied tonsils and adenoid vegetations should be removed; but it must not be thought that this is all that is necessary, for it is only by careful after-treatment that a permanent cure will follow. After removal of enlarged tonsils or adenoids it is important that the child should do respiratory exercises, the aim and purpose of which are to encourage nasal breathing. After, perhaps, years of mouth-breathing the habit will not be an easy matter to check. The following exercises are useful in such cases, and these should be carried out for ten minutes two or three times daily for at least six months after operation. They should not, however, be overdone, and should be stopped before the child tires.

1. Breathe deeply and slowly in and out through the nose, with the mouth close shut.

2. Breathe deeply in and out with the mouth close shut, and one nostril closed by pressing on it with the finger.

3. The same exercises, but with the opposite nostril closed.

4. With arms held above the head, breathe deeply in through the nose with the mouth shut, and out through the mouth with the mouth wide open.

Minute inquiries should be made regarding the child's dietetic régime, as improper feeding greatly aggravates the condition. Sugar and starchy foods should be reduced to a minimum; indeed, it is well to forbid all sweet things. The child should be trained to eat only at meal times, and should not be allowed to have anything in the intervals between the regular meal hours. The diet should consist chiefly of stale bread, dry toast with butter or dripping, bacon, eggs, fish, meat, milk, green vegetables in small quantity, and plain milk puddings (except cornflour, sago, or arrowroot). No tea, coffee, or stimulants should be given. The child should live as much as possible in the open air, the bedroom window should be kept open night and day, and the child should be encouraged to take plenty of exercise. Cold sponging is invaluable; for the first few times it may be as well to employ tepid water, but cold water should be used as soon as possible and will be found most invigorating. Cod-liver oil and iron wine, or an emulsion, may be given, and this is especially valuable if there is, or has been, any rachitic tendency. A change of residence may prove beneficial, and the child should be sent into the country for a time if its home happens to be in a town or city. Cough or other symptoms, if severe, can be treated by appropriate remedies, but under this general tonic treatment which is, I think, the important point in the treatment of such cases, these symptoms will probably improve and finally disappear. In cases of asthmatic nature superficial cauterisation of the septum nasi has been advised, but of this treatment I have had no personal experience.

In conclusion, let me say a few words regarding the prognosis. This can be said to be favourable, for one may say that in all cases a cure will eventually take place. Time is required, and it would be foolish to tell the parents that an immediate cure will result after the removal of tonsils and adenoids. The attacks become less frequent and less severe, and then gradually cease. A few cases resist all treatment, but these, I believe, undergo spontaneous recovery about the age of puberty.

THE TREATMENT OF SCALP WOUNDS.

By H. DRINKWATER, M.D.

For the past ten years or thereabouts I have adopted a plan of treatment of wounds of the scalp and face that has proved very successful—far more satisfactory in every respect than my previous practice, which was that commonly in vogue and still

used by most medical men with whom I have discussed the subject.

I see a great number of cases of injury to the head and face amongst the men employed at a large colliery in North Wales.

The plan adopted has several advantages—it is

simple, inexpensive, and time-saving—and the time-saving is an advantage both to myself and the patient. The wounds heal more quickly and almost invariably by “first intention,” so that the patient is able to return to his work earlier than was formerly the case. However extensive the wound, one may expect rapid and complete healing without suppuration.

The plan is what may be called the dry-exposed method, and consists in (1) thorough cleansing and washing with biniodide solution; (2) accurate apposition by sutures; (3) dusting with powdered boracic acid; (4) giving the patient a supply of boracic acid which is to be dusted over the wound

often enough to keep the surface dry. Whenever there is the least moisture (blood or lymph) visible the powder is to be applied. This generally means every few hours for the first day, and after that two or three times a day. No dressing whatever is applied, the air has free access to the surface of the wounded part, and evaporation helps to keep the part dry. There is no culture fluid for germs to grow in.

I find the subsequent cicatrix smaller than in wounds that are kept covered up. The sutures are removed on the sixth or seventh day.

If there is free arterial bleeding a pad and bandage is applied (after suturing the wound) and left on for one day only.

OTOLOGY.

SUPERFICIAL MASTOID ABSCESS:

Its Significance and Treatment.

IN the great majority of cases superficial mastoid abscess is due to middle-ear disease, and demands, of course, other measures than mere incision and drainage. Very occasionally a superficial mastoid suppuration is due to furunculosis of the meatus or to a septic condition of the scalp or of the pinna. The following is an instructive case of this latter, not very common, class, the recognition of which is of primary importance in determining operative treatment. A young child was seen with purulent otorrhœa and an abscess over the right mastoid. The abscess was opened by simple incision, but the child did not do well. Preparations were made for opening the mastoid cells, as it was thought, quite properly, that the superficial abscess denoted disease within the bone. An examination of the drum-head had not, however, been successful, but the case appeared to be so clearly one of the class more usually met with that the practitioner, who had not doubted his own diagnosis, had arranged for operation by an aural surgeon. As soon as the child was anesthetised the surgeon proceeded to examine the ear. He observed, however, over the temporal region two small dusky areas, quite recent scars of what might have been a little superficial ulceration. Bearing in mind that the tympanic membrane had not been seen, the meatus was cleansed, and the membrane was examined, and found to be perfectly normal. There was no injection of the blood-vessels, no perforation, and all the landmarks could be clearly seen. On the strength of these observations it was concluded that the mastoid abscess was due not to middle-ear disease, but to lymphatic absorption from impetigo. On enlarging the existing wound, it was evident that the otorrhœa was due to rupture of the abscess

into the external auditory meatus. The abscess cavity over the mastoid was laid open more freely and thoroughly drained, the periosteum was left intact, and the ear saved.

On the other hand, the following case illustrates the fatal danger of treating superficial mastoid abscess by simple incision alone when due to middle-ear disease, and also of postponing operation on the mastoid or tympanum until the onset of brain symptoms emphasises the danger of delay. A child under one year old had had superficial mastoid abscess and otorrhœa. The abscess had been opened and drained, and though for a time the child improved, the wound did not completely heal. The child during the next two months was ill with pyrexia and diarrhœa, but it was not realised, owing to the absence of external signs, other than otorrhœa and mastoid sinus, that these general symptoms were caused by the local disease. Not until head symptoms suddenly set in was the sinus opened up and bare bone found: a portion of the necrosed mastoid was removed, but the child succumbed to the meningitis which had arisen. The post-mortem revealed that the temporal bone had been the seat of chronic infective disease, with necrosis, which had set up recent meningitis over the cerebrum.

Those cases of otorrhœa which persist after incision and drainage of a superficial mastoid abscess should also be considered from the point of view of mastoid operation, even without the existence of a mastoid sinus. Merely to make an incision down to the mastoid, in the case of superficial mastoid abscess associated with middle-ear disease, is almost always useless unless followed up by draining of the mastoid cavity. The simple incision is, moreover, except as a tentative measure, actually dangerous, for it gives a sense of false security to patient and doctor alike.

DISEASES OF CHILDREN.

INFANTILE SCURVY.

MANY cases of scurvy are overlooked in infancy because the symptoms are slight or the affection is unsuspected, yet the disease is by no means uncommon and the results of proper treatment are quickly obtained, and most gratifying to all concerned. The affection has been described under the names of acute, hæmorrhagic, and scurvy rickets. It is time to give up all these names, and to realise that there is absolutely no connection with rickets, except in so far as the diet which produces infantile scurvy may also cause rickets coincidentally.

It is almost invariably in hand-fed infants that it occurs, as the result of a prolonged diet of cooked milk, whether sterilised, pasteurised, or boiled, of condensed milk, or of proprietary foods. Thus it must be ascribed to the lack of the fresh element, or to some particular constituent in uncooked food. In the few breast-fed infants in which it has been reported, the milk was of poor quality, deficient in fat and proteid, and perhaps contained some deleterious element. It has been ascribed to alterations in or deficiency of citric acid in the food; to a kind of acid-intoxication; and to the ptomaines of tainted animal food. The latter theory will certainly not apply to those infants fed on proprietary foods which contain no animal constituents.

It occurs in either sex and at any period of the year. Climate exerts no influence, except that plenty of fresh air and good hygiene may retard its appearance. It is more common among the better classes than among hospital patients, for the children of the former are frequently fed on a rigidly restricted diet of some form of cooked milk or proprietary food, whereas the infants of the poor often get tastes of various antiscorbutic foods at the parents' meals. It is important to realise that it is the prolonged use of these foods which induces scurvy. Thus an infant developed it in a mild form after taking a diet of cream, milk, sugar, and water, carefully sterilised for 20 minutes, for a period of eight months; and another one had a more severe attack after taking pasteurised milk for a year.

The majority of those attacked are from 6 to 12 months of age. Few are under 6 or over 15 months. In breast-fed infants cases have been noted at the age of three weeks, one month, and six weeks.

SYMPTOMS AND COURSE.

The infants are usually fat and pale. Gradually they fail in health, are fretful, lose weight, lose appetite, and cry when moved or even when approached, for fear of being moved. The onset is gradual, and possibly the immobility of a limb is the first sign to attract attention. Sometimes there is a history of a previous attack of the same nature, lasting for a few days only. If so, it will be found that on account of the child's health some temporary change had been made in the diet, a change which was antiscorbutic in character. In mild cases there may be nothing but anæmia, irritability, and crying

on movement; or slight bleeding from a mucous membrane; or some duskiness of the gums. The gums afford the most valuable aid to diagnosis, provided some of the teeth are cut. Typically they are swollen, hyperæmic, varying in colour from a dusky to a deep purple, and even ecchymotic, bulbous, ulcerating and bleeding freely. They may be so swollen as to present a fungating mass which conceals the teeth and projects between them.

The limbs present one or more painful, colourless, tender swellings, often symmetrical. The most common situation is the lower third of the thigh, and the least common is the upper limb. The swelling is due to subperiosteal effusion of blood. The epiphysis may be separated by hæmorrhage, and there may be bleeding into the joint. Bleeding may take place from the ear, into the eyelid, behind the eyeball, from any mucous surface, subcutem, and occasionally into the various serous cavities and the cranial cavity. Muscular pains are severe, and cause loss of rest. Fainting attacks are not uncommon. Often there is a moderate degree of fever.

It is extraordinary what errors of diagnosis are made in these cases. Heubner states that he prevented a surgeon amputating a limb for supposed sarcoma. Usually the infant is said to have got rheumatism—a very rare disease at such an early age. The pseudo-paralysis has been mistaken for infantile paralysis, and at first such a mistake is excusable if there is no swelling and the teeth are not cut, for sometimes acute anterior poliomyelitis is accompanied by considerable pain at the onset. The pain is often ascribed to rickets, but it is doubtful whether simple rickets is ever painful. If the swelling is limited to one joint or limb, it may be diagnosed as acute epiphysitis or acute bone disease. Multiple osteomyelitis and syphilitic epiphysitis have also been diagnosed. The latter disease generally occurs in wasted infants under six months of age. Epistaxis may be thought of no account, and renal hæmaturia may be ascribed to sarcoma. Subcutaneous hæmorrhages suggest purpura, and the gums acute leukæmia. Occasionally there is an acute nephritis. Suspect the presence of the disease in every fat, anæmic child, which is said to have pain in the limbs; inquire into the mode of feeding, and examine the gums.

TREATMENT.

Treatment may fail in advanced cases by reason of the anæmia and cachexia. In mild cases there will be improvement in a day or two. Put the child on a diet of uncooked milk and fruit juice, if it is under six months of age. Over that age, a little well boiled sieved potato can be added to the milk. In mild cases, if it is unsafe to use fresh milk, give fruit juice and milk just brought to a boil. Sodium lactate may be given, and can do no harm. Iron, arsenic, and cod-liver oil are useful in convalescence, but it is important not to run any risk of upsetting the digestion in the acute stage.

OPHTHALMOLOGY.

THE EXTRACTION OF CATARACT.

WHEN should a patient be advised to undergo an operation for the removal of a senile cataract?

The answer to this question would be quite simple if patients possessed only one eye, as then the advice would depend upon the degree to which vision was compromised; whereas, with two eyes, the condition of the vision in the other eye affects the expression of an opinion very considerably. A cataract is removed most easily, and with the greatest benefit to the patient, when it is ripe, that is, where there is complete opacity of the lens. At this stage the patient's sight in the affected eye is reduced to the mere perception and projection of light, and the operation will probably be a success, that is to say, the patient will see better after the operation than before. By "perception of light" is meant the ability of the patient to see through his cataract a lighted candle held at a few feet from his face, and by "projection of light" is meant his ability to locate accurately the position of the light in his field of vision. This amount of vision *must* be present. Without it an operation is not advisable, as the fundus of the eye in such circumstances will probably be diseased. Optic atrophy, choroiditis, detachment of the retina, or some other affection may be concealed behind the opaque lens.

If, then, the patient has a mature cataract in one eye, and has perception and projection of light in that eye, should he be advised to undergo an operation? The answer to that question depends entirely upon the visual acuity of the other eye.

If the other eye is blind, or the vision is, from some cause or another, so defective that the patient is unable to read or to move about safely, an extraction should be suggested, but if he sees well with the other eye and can read and get about, there is no necessity for any immediate operation. Should a mature cataract be present in one eye it is not necessary to extract it, provided that six-eighths or still better vision exists in the other eye. The reason for this is that the good eye will always be more serviceable than the eye which has been operated on, even though the latter has a greater visual acuity, as the sound eye retains its focussing power, which an eye deprived of its lens has lost. A high convex lens for distant vision and a still higher one for near vision is always required after the extraction of a cataract, and thus the two eyes no longer act in association for all distances.

Still less is an operation indicated where one eye contains a mature cataract and the other remains quite healthy and with normal vision. An operation is only justifiable in this case if the patient wishes it because the unusual appearance of his eye diminishes his chances of employment, or on account

of some other economic or social reasons; it cannot be urged for visual reasons. Vision is measured by the visual acuity of the better eye, so that if the visual acuity of one eye is quite good, the removal of a cataract from the other eye may not increase the acuity of vision, but only the area of the visual field. Since successful vision in an eye deprived of its crystalline lens usually depends on the use of a high convex glass, the patient's power of orientation is much diminished by the prismatic effect of this convex glass in lateral vision and by the absence of accommodative power in the eye, although his actual visual acuity may equal six-sixths.

If the cataract is not ripe in either eye the necessity for operation is still less apparent. It may be argued—If the operation will at some time be necessary why not operate at once? The answer is that patients may still retain useful vision for years, and may even die before the necessity for an operation arises. A house need not be demolished on the first sign of a flaw in its structure, or a lethal chamber advised for every one showing signs of old age.

The rapidity with which a lens becomes entirely opaque varies with age and other conditions. Lens opacities increase much more rapidly in young than in old patients, and more rapidly in hypermetropes than in myopes. The conclusions may be tabulated thus:—

Present Condition.

1. Mature cataract in an otherwise healthy eye with vision equal to $\frac{1}{2}$ in the other eye.
2. Mature cataract in one eye, and $\frac{1}{4}$ or better in the other.
3. Mature cataract in one eye, and $\frac{1}{8}$ or worse in the other.
4. Immature cataract in each eye, the visual acuity being equal to $\frac{1}{8}$ or more.
5. Immature cataract in each eye, the visual acuity being less than $\frac{1}{8}$.

To Operate or Not?

No operation should be advised except for the sake of appearance.

No operation should be performed.

Operation may be advised on the mature cataract.

An operation is not necessary, unless the cataract is progressing rapidly.

An operation should be performed on the eye with the poorer vision.

In conclusion, there is no urgency for an operation in any case when the patient's visual acuity is six-eighths, or can be brought up to six-eighths with suitable glasses. Patients having this vision can usually read ordinary print. If the cataract is increasing rapidly there is more reason for operative interference than if it is slow.

Never omit to examine a case of suspected cataract as early as possible, and that for two reasons: First, the diagnosis may not be correct, and cases of glaucoma have been watched until vision was irrevocably lost under the impression that they were cases of cataract; and secondly, the surgeon ought always to take an opportunity of examining the fundus in order to see if it is healthy before the lens becomes too opaque for this to be done.

PUBLIC HEALTH AND HYGIENE.

THE CENTRAL ORGANISATION OF THE PUBLIC MEDICAL SERVICES. SHOULD THERE BE A MINISTER OF HEALTH?

IN the House of Commons on May 9 Mr. Ramsay Macdonald asked the Minister of Education whether he proposed to create a medical department in connection with the Board of Education to supervise local work done in the medical inspection of school children, and whether legislation would be necessary in order to create such a department. It appears from the answer that legislation will be necessary, and we hope that when the Government take this in hand they will do so in a comprehensive manner and refuse to subordinate considerations of health to those of education.

A recent article in the *Morning Post* states:—

"It is necessary that there should be from the first a medical department at the Board of Education, directly responsible to the Minister for the guidance of the medical officers throughout the country. Otherwise the inspection will be neglected, for it cannot easily be enforced; or, worse still, it will be done in a perfunctory and slipshod manner by medical men ignorant of their duties for local authorities indifferent to the whole matter.

"The duties of a school physician are manifold and call for either special training or special guidance. Nearly 90 per cent. of the issues involved are technical questions of purely educational and pedagogical importance affecting the educational progress of the race. The remaining 10 per cent. are concerned with minor issues, such as the prevention of infectious and contagious disease, and the sanitary condition of the school premises.

"Medical inspection of schools does not concern the Local Government Board, and if the supervision of the inspectors is entrusted to that Board the result in practice will be the mere examination of school drains and of such other trifles as may occur to the medical officer of health. What has the Local Government Board to do with the physiology of educational methods or with the relations of medicine and pedagogics, or with such problems as mental deficiency, defective vision, defective teeth, and 'special schools'? Yet these are the most essential matters with which the school physician will be concerned."

If the Local Government Board has nothing to do with physiology, we may well ask what the Board of Education has to do with medicine? The one board is the central authority of health, the other of education, but neither should be water-tight compartments impervious to the concerns of the other. If the Local Government Board were ostensibly and exclusively the central authority of health, as the Board of Education is of education, there would be no question as to its concern in any problem of State medicine, pedagogic or otherwise. Moreover, we disagree entirely with the estimate of our contemporary that nearly 90 per cent. of the issues involved in the duties of the school physician are technical questions of "purely educational im-

portance affecting the educational progress of the race." Where medicine becomes the handmaiden of education, as in such case she would, we admit that the Board of Education is chiefly concerned. Faulty educational methods to be rectified in consultation with the physician are not an unimportant reform and are even urgently required. But these are not the considerations which have quickened the national conscience to a sense of the serious issues involved in the known deplorable physical condition of the children.

No; it is the health aspect of the problem, and not the educational that has stirred the public imagination. The question is so important that educational considerations do not arise until it is settled. It is obviously absurd to provide for the education of the child before you have secured the elementary conditions of mere animal survival. The amazing thing is that for so long it has been thought possible to ignore the primary claims of health in the supposed interests of those of education. And the very men who have insisted most strenuously on the need for rectifying the perspective, the medical officers of health, who by the facts they have elucidated have been chiefly instrumental in bringing the question into the domain of practical politics, it is now urged are unfitted to deal with this health problem, because in their hands it will resolve itself into "a mere examination of school drains and such other trifles as may occur" to them. The medical officer of health no longer is to concern himself "respecting all the influences affecting or threatening to affect injuriously the public health, nor to inquire into the causes, origin, and distribution of diseases within his district," but he is to become a slightly mitigated inspector of nuisances. The medical officer of schools, who, so far as he at present exists is the medical officer of health, is to become a pedagogue faintly tinctured by a medical training, nine-tenths of whose work is to be outside the real work of preventive medicine, and is to be largely devoted to the "physiology of educational methods" and such other bypaths of medicine as, exclusively followed, would constitute a class of quasi-medical practitioners.

But medicine must not be disintegrated into fragments incapable of identification with that historic body of thought and practice of which, as a profession, we are so justly proud. We protest against the creation of a body of medical pedagogues, just as we resent the attempt to degrade the medical officer of health to the level of a mere inspector of drains. We hold that if medicine is to be saved from this fissiparous process it is by the creation of a central department of health presided over by a minister. And we are opposed to the alternative method, that of the appointment of medical officials intent on subordinating medicine to departments of State,

which, after all, are of secondary importance to the great interest with which medicine is identified. We are glad to note that the suggestion that a Minister of Health to represent in the Cabinet this great national concern is being canvassed as a public and not as a mere professional interest. Mr. A. Rolland Rainy, M.P., delivered on the 10th inst. an address at the New Reform Club on "The Necessity for a Minister of Public Health," and a resolution in favour of creating such an office was adopted.

The care of health is a matter of such prime importance to the nation, taking precedence in all well-regulated minds of so many other interests which have received priority of political considera-

tion, that makeshift arrangements will no longer satisfy in the dispositions to be made for its further safeguarding. What is needed in the first instance is central organisation, the creation of a department of health, with a Cabinet Minister at its head. To the Minister of Health might be entrusted the re-organisation of the public medical services. This should not definitely be undertaken until the report of the Royal Commission on the Poor-law now sitting has been issued, and until it is, whatever of new work has to be compassed might safely be left to the existing services, for this is certain: the competency of the medical officers in the different services is beyond question. It is in organisation that inadequacy is apparent.

PRACTICAL NOTES ON DIAGNOSIS AND TREATMENT.

Insomnia.

P. Pregowski recommends a warmed bed as a valuable sleep-producing agent. This recognition of its therapeutic virtues may, perhaps, lead to a revival of the old-fashioned warming-pan.

Vulvitis in Infancy.

A USEFUL lotion is warm milk and water, to each pint of which a teaspoonful of borax and a teaspoonful of liquor plumbi subacetatis have been added. This may be applied several times daily.—*Dr. Amand Routh.*

Pigmentation of the Skin.

VERY extensive pigmentation of the skin may occur in Graves' disease, and also sometimes in chronic Bright's disease. Hence this condition is not by itself sufficient for a diagnosis of Addison's disease.

Salicylism and Epistaxis.

DR. E. LEACH suggests that instances of epistaxis occurring in the course of influenza are due, not to the disease, but to the salicylate of sodium which is prescribed as a remedy. He quotes a case in which on three separate occasions the administration of salicylates was followed by epistaxis.

Bone Disease in Syphilis.

THE subjects of inherited syphilis are very prone to bone disease and often show severe forms of it; but it occurs in them with very considerable differences from those we observe in the acquired disease. In the latter it is often very late, say, after ten or twenty years of good health, and it does not usually affect many bones at the same time. In the subjects of inherited disease, on the contrary, it is almost invariably multiple, and often symmetrical, and it is met with in early youth and is transitory. *Mr. Jonathan Hutchinson.*

Malignant Syphilis.

In severe cases of syphilis, and especially when the patient cannot readily take mercury or when the drug disagrees with him, sea-air should be prescribed. In itself it will not cure the disease, but it will enable the patient to take the remedy. Quinine and opium also have some value in the same direction.

Sudden Death in Addison's Disease.

SUDDEN death is one of the recognised dangers of Addison's disease. It is due to syncope and is particularly liable to occur in the more acute cases. Suddenly sitting up in bed may determine it.

Treatment of Erysipelas.

As an internal remedy quinine in 4- to 8-grain doses, according to the temperature, may be given three or four times daily, and the following may be used as a local application:—Perchloride of mercury 1 grain, lanoline and vaseline, of each, half an ounce.

Night Sweats.

As the result of a series of observations with various drugs, Dr. Hy. Conklin came to the conclusion that agaricin is the most effective remedy in the treatment of the night sweats of phthisis pulmonalis. It can be given as a pill, dose $\frac{1}{8}$ to $\frac{1}{2}$ grain. A dose should be given late in the afternoon and a second dose four or five hours later.

Constipation in Infants.

COD-LIVER OIL is recommended by Dr. Brach, of Frankfort, as the best laxative in suckling children; with it a little sugar of milk may also be given. Gentle massage of the abdomen is another measure of great service in this condition. It should be applied three or four times daily, and for some five to ten minutes on each occasion.

Temperature in Pleural Effusions.

Pyrexia and hectic may be absent or little marked in empyema, especially in long-standing cases, for the alteration of the pleura or the degree of tension may prevent absorption. On the other hand, well-marked febrile temperatures may be present in serous effusions.

Stimulants in Blood Poisoning.

In giving brandy you should give it not by tablespoonfuls but by teaspoonfuls, since it is better for a patient suffering from blood-poisoning that the necessary stimulant should be taken in small but repeated doses. I am quite sure of this, that I have seen cases which have been saved by stimulant treatment, particularly cases of septicæmia, and occasionally a case of pyæmia.—*Mr. Christopher Heath.*

GYNÆCOLOGY.

HÆMORRHAGE FROM THE UTERUS AFTER THE MENOPAUSE.

By H. T. HICKS, Assistant Surgeon to the Samaritan Hospital, Obstetric Registrar to Guy's Hospital.

IRREGULAR hæmorrhage at or about the time of the menopause is a matter of almost everyday experience, and may be due to innocent or malignant new growth. More often, however, it is associated with the vascular changes which take place in the uterus at this time. Arterial degeneration plays an important part in the causation of irregular uterine hæmorrhage, so we find that patients suffering from chronic nephritis or chronic alcoholism sometimes bleed profusely, especially when the vascular changes are taking place at the menopause.

When, however, the menopause is once definitely passed the uterus atrophies and ceases to be a functional organ. Hæmorrhage then is seldom due to simple vascular causes, but rather to new growth. We will not discuss growths of the cervix, which are very obvious causes of hæmorrhage, but shall consider the difficulties which are met with in dealing with hæmorrhage from the body of the uterus.

Fibroids, especially submucous tumours, will cause bleeding after the menopause, but as a rule there is a history of previous menorrhagia, and the bleeding with fibroids does not often recur when the menopause is definitely passed. Large fibromyomata may remain quiet for a considerable period after the menopause and then degenerate or become sarcomatous and give rise to hæmorrhage. This is well illustrated in the following case:—

A lady, aged 55, was known to have had a fibroid about the size of a cocoa-nut for nine years. The menopause was reached at the age of 52 years. Two-and-a-half years later, and six months before the operation, she began to bleed from the uterus, the tumour became soft and increased in size. At the operation a large red necrotic tumour (necrobiosis) was removed.

Fibromyomata must be looked upon as a rare cause of bleeding after menstrual life has definitely ceased, and if hæmorrhage does occur in connection with a fibromyoma, carcinoma of the endometrium should be suspected. It is by no means uncommon for a carcinoma to develop in a fibroid uterus; and as an example of this I may briefly refer to a case from the out-patient department of the Samaritan Hospital. A woman, aged 52, had ceased menstruating for two years. Previous to the menopause there had been fairly profuse menorrhagia. On examination a fibromyoma of about the size of an orange was found, growing in the uterine fundus. One might have been tempted to diagnose that the bleeding was due to the fibroid. I curetted the uterus, and found that the curettings were obviously carcinomatous. Subsequently I removed the uterus, and the patient was well a year after the operation. There is no direct relationship between fibromyoma and carcinoma, but these two forms of growth are most often met with in sterile women. Hence their not infrequent association.

Most text-books state that so-called senile endometritis is a cause of a blood-stained watery discharge, but so far as I know, there is no satisfactory pathological evidence which justifies the term, senile endometritis. If a patient is suffering from a watery, blood-stained uterine discharge, she should be looked upon as a case of carcinoma, until exploration fails to demonstrate the disease. It must be remembered that the uterus may be hardly enlarged and yet contain a carcinoma. Tuberculous endometritis may occur late in life, but it is rare and is almost invariably diagnosed as cancer of the body until the uterine curettings are examined.

There are a few other causes of uterine hæmorrhage in late life, such as malignant disease of the tubes and ovaries, but in these there is no great difficulty in diagnosis, owing to the presence of a definite tumour. It is cases of bleeding without apparent cause which give rise to difficulty. The bleeding in carcinoma of the uterus may be watery, or there may be recurrent attacks of more or less profuse hæmorrhage. Sometimes one may find a history of three years' bleeding in this disease, and even after this long period the uterus may not be greatly enlarged and the growth may still be within the limits of the uterine muscle. It is surprising how chronic some forms of carcinoma are and how good the prognosis is after operative interference. In fact, carcinoma of the body of the uterus is one of the least malignant forms of cancer met with in the human body. Metastatic growths are rare, and local dissemination and infection do not occur as a rule till late in the disease. If one contrasts the prognosis of carcinoma of the endometrium with that of carcinoma of the cervix, how hopeful is the former and how hopeless the latter. It seldom happens that carcinoma of the body does not give a timely warning of its existence, and even slight hæmorrhage from the uterus, occurring in later life should always excite suspicion. An exploratory curetting should be advised in all cases of irregular hæmorrhage, and when once carcinoma is diagnosed abdominal pan-hysterectomy should be performed. If the operation is decided upon, great care must be taken to guard against sepsis, for this is perhaps the greatest danger. The uterine cavity is often intensely septic, and so is the vagina, and the peritoneum is very likely to become infected. The immediate dangers following the operation are more serious than are the remote dangers of recurrence. For three days before the operation the vagina should be douched and compressed by means of antiseptic gauze plugs, and immediately before the operation, when the uterus is being removed by the abdominal route, the cervix should be tightly closed with sutures to prevent the escape of septic material.

RESIDENT MEDICAL OFFICERS' DEPARTMENT.

HYPODERMIC MEDICATION.

THE modern irrational custom of giving routine hypodermic injections in haphazard fashion for shock and pain is greatly to be deplored. At the proper time and under certain conditions subcutaneous injections are immensely superior to all other methods of treatment. But the dangers attending loose and unconsidered injections of potent drugs cannot be too strongly insisted upon. Furthermore, one thoughtless hypodermic injection, never repeated by the physician, may become the starting-point of an irrevocable habit in the patient. Accurate dosage and certain and immediate effects are great advantages, and no injection should ever be given without careful consideration of all the circumstances of the case.

Medical students do not always receive sufficient practical instruction in the administration of hypodermic injections. They are seldom in the wards at the times when the house officer is called upon to apply this form of treatment. The result is that many newly qualified practitioners enter upon house appointments or commence private practice with imperfect knowledge of the principles of hypodermic medication. In the first place, we recommend the junior practitioner to have his own hypodermic outfit and to keep it always at hand. Emergencies in which the prompt injection of strychnine, morphine, or apomorphine means life or death to the patient arise at the most unlikely times, and even in hospital it is as well not to trust to others for the right things being in the right place at the right moment. A good all-glass aseptic syringe with three or four tubes of compressed drugs can now days be carried in the most convenient form, and it can be relied upon to act efficiently at the shortest notice. With his own outfit in his waistcoat pocket, the house surgeon is prepared for emergencies and is independent alike of excited nurses, of impervious needles, and of adherent phial stoppers.

With regard to the administration of hypodermic injections in the wards by nurses, the resident medical officer must be guided by the rules of his own hospital and, of course, by his own judgment. In some hospitals the night nurses are allowed, under certain restrictions, to give injections when expressly ordered by the resident; in others, only the sister of the ward and the night sister are permitted to do so. The former plan, in spite of certain obvious objections, is, in our opinion, the better, for there are cases in which the inevitable delay in sending for the sister or house officer to administer the prescribed injection may prove fatal to the patient.

The resident, when he anticipates the occurrence for strychnine or morphine, should write a prescription for this purpose, and should give explicit directions as to the circumstances under which it is to be used and as to whether he himself is also to be summoned to the case. Once given, the hypodermic should not be repeated without his express sanction; and his instructions should be renewed from day to

day, so long as the patient's state renders the necessity for a prompt injection probable or even possible.

Usually every ward is supplied with a syringe and small bottles of the B.P. injections of morphine and of strychnine. The house surgeon should periodically test the efficiency of the syringe, while the injections should at intervals be replaced by freshly prepared solutions. The china tray for this apparatus should also contain bottles of distilled water and of ether or alcohol, together with two small beakers and a supply of swabs. After each injection the needle should be boiled with the wire in its lumen, and, of course, a separate outfit should be kept for typhoid or other infectious cases. Running first alcohol and then air through the needle prevents rusting and prolongs its life.

As for the injection itself, it is hardly necessary to say more than a word or two. Few medical men, however, are as careful about cleaning up the site of the puncture as they should be. An elaborate preparatory dressing is unnecessary, but a few passes over the skin with a swab of alcohol take no time and form a rational precaution. If the resident happens to inject morphia into a vein instead of into the subcutaneous tissues—a very rare occurrence even in the dark—both he and his patient will have a very rude shock. To avoid this catastrophe one may detach the body of the charged syringe from the needle after the latter has been thrust under the skin, and observe whether blood flows in any quantity from the lumen of the needle. This is quite easy with an all-glass syringe, and occupies only a moment or two. It is only necessary when the veins cannot be seen through the skin, and when deep intra-muscular injections of mercury or ergotin are administered.

A word of warning may be given on the danger of repeated injections of strychnine to collapsed or apparently moribund patients. Bold and continued doses have resulted before now in the patient emerging from one precarious condition only to subside into a state of strychnine poisoning, recognised when it is too late and impossible to overcome. This is especially true in the case of children, who often tolerate strychnine almost as badly as they do opium. Finally, we would remind the junior practitioner, whether in hospital or in private practice, that there are various efficient substitutes for morphia in selected cases. As we have said above, subcutaneous injection should only be given when absolutely necessary. Pil. saponis co. is an excellent method of giving opium when it is advisable to conceal the nature of the treatment from the patient or the attendants; and we might add that an injection of sterile water has often produced sleep and relieved imaginary pains in neurotic or over-anxious patients. The resident should also remember that, when a fair dose of morphia fails in its effect, it may be that he has to deal with the victim of a drug habit.

HOSPITAL ADMINISTRATION.

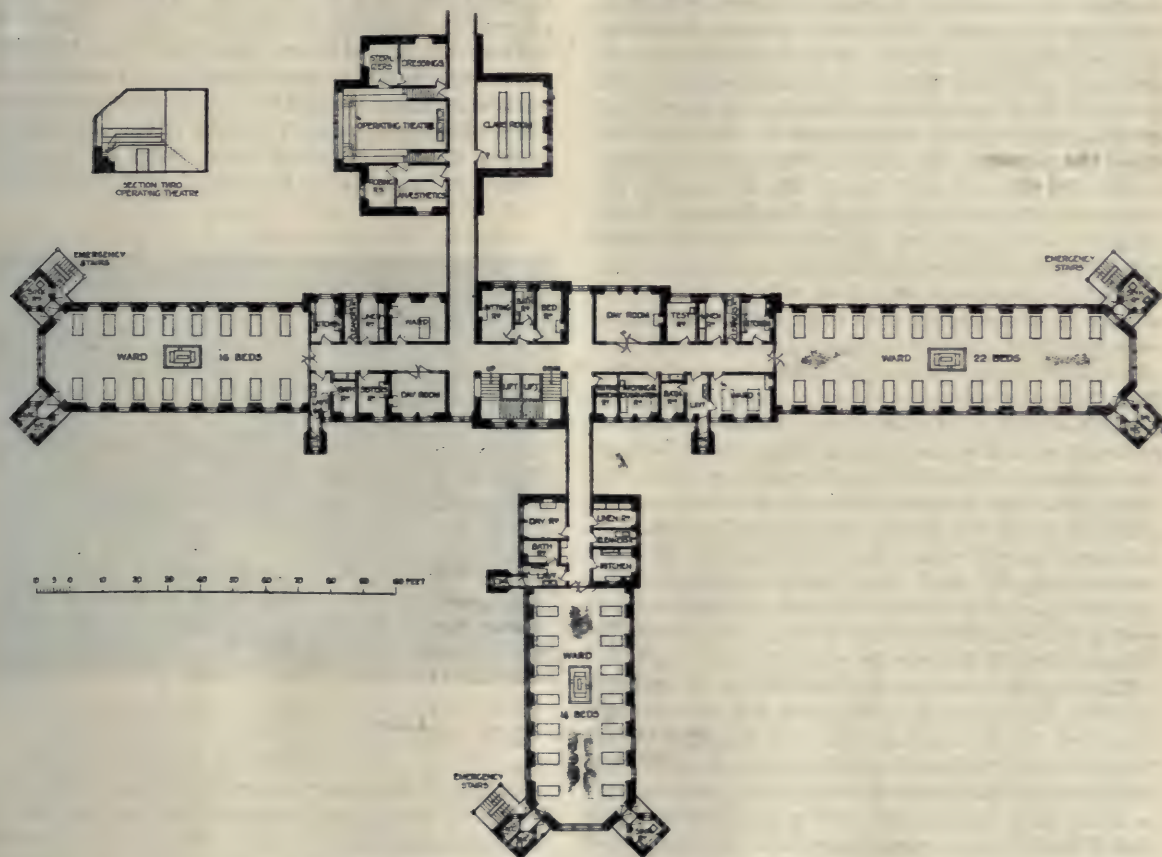
CONSTRUCTION AND ECONOMICS.

THE UNITS OF GENERAL HOSPITAL CONSTRUCTION.

THE SURGICAL WARD UNIT.

THE scheme of ward units is quite a departure from the old system of hospital administration, and is, undoubtedly, more expensive in construction. This is exemplified particularly in connection with the surgical unit. Previously, one, or at most two,

operating theatre in each surgical ward unit. The surgical differs from the medical unit, then, in the addition of an operating theatre, with anæsthetic-room, rooms for sterilising surgical dressings and storing splints, and, where possible, a small male ward of from 12 to 16 beds for the treatment of accidents. By the provision of this accident



THE SURGICAL WARD UNIT ON SCOTCH SYSTEM.

operating theatres were considered sufficient for any hospital, and the members of the surgical staff had the use of the theatre in turn. Although, on the ground of economy in construction much can be said in favour of this arrangement, it has obvious disadvantages. Patients are frequently kept waiting for operation when the theatre is not available; and where the clinical instruction of large numbers of students is involved, the lack of accommodation seriously hampers efficient teaching. But the main disadvantage arises from the fact that in the desire to accommodate these students, the buildings are so constructed and arranged that it is quite impossible to ensure thorough cleanliness. Moreover, the developments of aseptic surgery and the increased number of operations now performed, render the provision of additional theatres an absolute necessity. Hence the justification for including an

ward patients in the general ward who may have undergone serious operation are not liable to be disturbed by the admission of accident cases, at any hour of night or day. In a hospital which is not a teaching school this additional ward is not essential; it might there be found more convenient and more economical to set aside a separate unit of surgical wards for the treatment of accident cases. The accident ward, although smaller than the general male ward, does not differ from it in any essential detail. It should have the same sanitary annexes, bathroom and lavatory accommodation, ward kitchen, scullery, linen-room and day-room for convalescents. The sister's room, washing and examination room, test-room, visiting surgeon's room, and resident's quarters, are common to the unit.

The surgical ward unit should be so placed that

the operating theatre will have a north aspect and roof light as well as windows. The accompanying plan shows such a surgical ward unit.

The main wards, as in the medical unit, run north and south, the small ward for accidents is to the west, and on the east is a corridor communicating with the other parts of the hospital. Leading from this corridor on the north is the operating-theatre with its various rooms, and on the south a lecture room is shown which may be used either in connection with the surgical unit on the one side, or the medical unit on the other.

Within recent years, both in this country and abroad large sums of money have been spent on the erection of operating theatres. Every up-to-date hospital, irrespective of its size, has an operating-theatre fully equipped with all the latest appliances, although it may not be in use for days, or even weeks at a time, and the capital sum expended may be out of proportion to the requirements. In some hospitals theatres have been built so elaborate that they defeat what should be the main object, namely, the possibility of having thorough cleanliness in every corner. In designing an operating theatre the first point to determine is whether or not provision is to be made for students, and if so, what number. No matter how the space for students be arranged, only a limited number can have a satisfactory view of an operation. In designing an aseptic theatre, therefore, the accommodation for students should be limited to 50 as a maximum. In the interest of patients as well as students, no class should exceed this number. The old type of operating theatre of thirty years ago provided for two or three hundred students, had a wooden floor and fixed benches, and no doubt served many useful purposes. But for modern surgical work it is quite impossible. The modern operating theatre is much reduced in size, and is so constructed that it can be thoroughly cleansed from floor to ceiling.

The provision for the accommodation of students in an operating theatre is a most difficult problem to solve. In the attempt to keep the area of the theatre aseptic, where the patient, the surgeon, and his assistants and nurses are at work, the student has in many cases been put in such a position that it is with difficulty he can see any detail. Mirrors placed at an angle over the operating table have been tried, in order that students who occupy back benches might obtain a better view. It is difficult enough for a student to follow the details of an operation without having to calculate that what he sees in the mirror as left is really right, apart from the danger of hanging so weighty a body from the ceiling over the patient; as a result this arrangement has found but little favour. If we adopt the view that provision should only be made for 50 students, then how may that number be most advantageously arranged for? The plan and section show two rows of seats under the vertical light, and a gallery on each side, also with two rows. These latter are sufficiently high to permit of an uninterrupted view, and the students under the window have also the advantage of a direct view, without obstructing the light. Each student has a lifting seat of simple construction.

In the attempt to secure a really aseptic theatre nearly every variety of material has been experimented with. In some continental hospitals large glass slabs have been used in the construction of both floors and walls, but experience has proved that glass is quite unsuitable. When the slabs are placed close enough to prevent dust collecting between the joints, the glass cracks with variations of temperature. Glass tiles are open to the same objection. Marble slabs have been adopted both at home and abroad; but probably the best material for walls is a highly glazed fireclay tile, for the roof a hard cement or adamant plaster, well polished and coated with enamel paint, and for the floors marble terrazzo well laid on concrete, the concrete being allowed to solidify before the terrazzo is put on. If the terrazzo be laid before the concrete has had time to thoroughly set, and be exposed to changes of temperature, cracks are apt to occur, which may not be visible for some time. The floor of the area should have a slight incline and slope towards a gutter formed in the terrazzo, into which all the basins dis-



FIG. 2.—AN OPERATING THEATRE.

charge and the waste water is drained away. This gutter is fitted with a special trap which can be easily inspected and cleaned. Fig. 2 shows the area of such an operating theatre. The walls are tiled, and there are no pipes or projections to be seen. The pipes are all exposed on the wall of the sterilising room behind the theatre, and come straight through the wall to the various fittings, thus reducing the amount of surface where dust might collect. The artificial lighting requires careful consideration.

No light should be fixed immediately over the operating table. Two groups of incandescent lamps with large reflectors should be placed on each side of the table, as shown in fig. 2. Each of these fittings should be provided with a separate fuse, in order to avoid the possibility of both lights going out at the same time. They should be arranged to raise and lower, and the reflectors should be constructed so that they can be fixed at any angle.

(To be continued.)

ST. BARTHOLOMEW'S HOSPITAL.

IMPROVED METHODS AND A PROGRESSIVE SPIRIT.

WE congratulate the Treasurer, Lord Ludlow, and the Clerk, Mr. Hayes, upon the improved form and complete character of the Treasurer's Report for 1906, with the accounts made out upon the Uniform System. The changes introduced are excellent and exhibit a progressive spirit in the management which we heartily welcome. The changes which have been made under the present treasurer in regard to the details of the workings of the several departments of the Hospital and Convalescent Home have been great and important. The checks now exercised over the economical management through the House Committee, the Visiting Governors' Committee, the Finance Committee, and the Drugs and Instruments and Appliances Committee, must have tended greatly to improve the whole administration. It is further satisfactory that the Treasurer records his indebtedness and thanks to the Medical Council for much valuable advice and assistance. We welcome the name of Mrs. Alfred Willett among the new Governors, for her husband has rendered yeoman service for many years. For some reason which is not stated, the qualification of the Governors has been raised from a donation of £50 to £100.

The Special Appeal Fund for Re-building does not make material progress. During the year less than £1,400 has been contributed to this fund, and in three years the total sum raised by special appeal has only reached £118,371. In addition to this sum, £6,600 has been received for special objects, including the Pathological Block, the New Nurses' Home, and the publication of the "History of St. Bartholomew's Hospital" by Dr. Norman Moore.

The number of in-patients treated during the year has been just over 7,000. The daily average number of patients in the Hospital has been 556, the average residence of each patient being 26.6 days. The total number of new cases in the Casualty, Midwifery and twelve Special Departments for out-patients has been 126,021. Inquiries were made into the pecuniary circumstances of 8,673 of these patients, of whom 380, or less than 5 per cent., were considered to be unsuitable for gratuitous aid; 1,070 in-patients have been sent to the Convalescent Home at Swanley, and during seven months 92 children were sent to the Metropolitan Institution at Broadstairs, for which the Hospital paid one guinea each out of its Samaritan Fund; 416 patients were provided with artificial limbs or other surgical apparatus, 466 were provided with money, 193 with clothing, and 153 with both money and clothing. Seven persons received an average of £10 each from the "Prisca Coborn Fund for the Relief of Incurables." It is interesting to note that the average stay of each patient at the Convalescent Home was 19.24 days, whilst the average cost of each patient was 20s. 4½d. per week, a reduction of 1s. 3½d. per head per week as compared with 1905.

The income of the Hospital in 1906 shows an

increase of nearly £4,300 and of this increase upwards of £1,500 is derived from donations and legacies. The ordinary expenditure shows an increase of nearly £500, and there was an excess of expenditure over income for the year of £2,638. This increase, the Treasurer states, is more than accounted for by items which are of the nature of capital, rather than annual charges. The Treasurer, on the advice of the Finance Committee, has re-invested nearly £25,000 formerly standing in Consols, in securities yielding a higher rate of interest. The new investments mainly consist of 3 per cent. Consolidated Stock of the London County Council. At the instance of the Medical Council, the Medical Staff has been augmented by the appointment of an Assistant Surgeon to the Aural Department and an Assistant Physician to the Department for the Diseases of Women.

The Treasurer is strongly of opinion that a new Nurses' Home ought to be provided. The present buildings are in no way adequate for their purposes; they provide scanty room for the nurses, and are situated in so many different parts of the Hospital, that it is difficult to supervise them with due efficiency, or to conduct them with proper economy. It is not a little remarkable that the sum of £1,500 has been collected by past and present nurses for the new Home, which ought to be put in hand without a moment's avoidable delay. Thirty additional nurses have been added to the Staff during 1906, who have enabled the hours of duty of both Day and Night Nurses to be materially lessened. It is satisfactory to be able to record that Miss Ellen M. Greenstreet and Miss Mary Davies, after 27 and 35 years' service respectively as Sisters, on attaining the age limit, have been granted pensions. Miss M. R. Fowler, as Superintendent of the Trained Nurses' Institution since 1886, has been granted a pension of £50 per annum, as a gratuity, payable out of the profits made by the Nursing Staff of this Institution.

The City Corporation has arranged the lease of a permanent site from the Governors for one of the police ambulances which have recently been instituted in the City. A Racket Court will shortly be provided for the Resident Medical Staff who have now the advantage of occupying their new quarters facing Giltspur Street. It is anticipated that the new Out-patients' and Special Departments will be finished and ready for use in the autumn. The new Pathological Block now in course of erection for certain special work will cost nearly £30,000. Owing to reforms instituted by Lord Ludlow, the rental of the Hospital properties has been increased by £1,279 a year, whilst a saving in the annual cost of managing these properties has resulted to the extent of £374. It may be gathered from this record of the work done in connection with St. Bartholomew's Hospital during 1906, that under Lord Ludlow's Treasurership great improvements have been introduced and increased efficiency. So St. Bartholomew's Hospital, which is the oldest British Hospital, is now in a fair way to increase its usefulness and popularity with the patients and the public.

FRENCH LAW AND CUSTOM FOR ENGLISH VISITORS.*

EVERY year more and more English people go to France for health, pleasure, or business. Every year many of them come home grumbling at some misunderstanding or grievance, the result of imagining that English laws and customs should prevail everywhere. It may be stupid and benighted of foreigners to prefer their own ways to ours, but since it is so, we must e'en submit, or stop at home. But the French, foreigners though they be, have a wise proverb which says that "to know all is to forgive all," and perhaps if we understood their ways better we should not so often fall foul of them. Mr. Arthur Browne has compiled in a handy volume a great deal of information which should be of the greatest use to tourists or residents in France, or, indeed, to any who have dealings with Frenchmen either on this side of the Channel or the other. It conducts the Englishman in France literally from the cradle to the grave, for one of the earliest sections deals with the delicate question of naturalisation. It is well to know that the child even of British parents, if he is born in France, must, if he is domiciled in that country, make a declaration within the year following his twenty-first birthday that he wishes to decline French nationality, or he will be regarded as a Frenchman, and consequently will have to serve in the army, and in every other way fulfil the duty of a French citizen. Until he attains his majority he is regarded as French. Thus, as Mr. Browne points out, "it is quite conceivable that a man may, according to French law, be a Frenchman without knowing it."

LANDLORD'S LIABILITY.

But the majority of English persons who go to France go there only as visitors, and many a one will be glad to learn just what are his rights when he takes up his abode in a hotel. In some hotels notices are hung up stating that rooms are held to be taken by the week, but the law holds that a room is taken only by the day, and a visitor cannot be made to pay for more days than he occupies it, unless he has entered into pension terms, by which he obtains board and lodging at a certain sum per week. But in the absence of such special arrangement he is regarded as a daily tenant. A hotel-keeper is responsible for his visitors' property, and if the latter's effects are stolen the proprietor must make the loss good, but in the case of money, or securities for money payable to bearer, which have not been entrusted to the landlord for safe keeping, the liability is limited to £40 sterling, except in the principality of Monaco, where the hotel proprietor's liability is unlimited. If, however, it can be shown that when a robbery has been committed the guest has been guilty of contributory negligence, the landlord may be exonerated altogether. It is useful also to know that a hotel-keeper has no claim for damages against a visitor who may develop infectious disease while staying at his hotel, but can only claim to be repaid any expense to which he may be put in disinfecting the rooms occupied by the sick person. If, however, the visitor is requested to leave, could do so without endangering his health, but refuses to go, the hotel-keeper may have a claim for the loss entailed upon him through the injury the presence of the disease will do to the reputation of his hotel. Further, in the case of a death, the hotel-keeper has no right to make any claim for the loss to the house, even though the fact of a death occurring may empty his hotel. He can, as in the case of sickness of a guest, claim to be recouped for the cost of putting the death-chamber into a proper sanitary condition

in accordance with the requirements of the authorities, and for any actual damage. It is possible that the good feeling of friends and relatives may add a solatium for trouble given and injury to the business of the hotel, but this is purely an act of grace, and not a legal claim. It is curious to know that in many French towns it is customary to entrust the funerals of Roman Catholics to one undertaker, and those of Protestants to another. This division rather helps to simplify arrangements in the case of a death. Nurses who go abroad with patients would do well to consult those chapters of Mr. Browne's book which deal with sickness and death and the responsibilities entailed by these before the law. Occasions may well arise when such knowledge would be very useful to helpless and ignorant mourners who are neither able, nor in the humour, to investigate these matters for themselves.

REGISTER! REGISTER!

The nurse would have a responsibility to herself also as a wage-earner. One of her first acts should be to register herself. By the law of August 8, 1893, all foreigners, male or female, who wish to earn money in France, must make themselves known at the Mairie in a provincial town, or at the Prefecture of Police at Paris, within eight days of arrival. They should have papers to prove their identity. For this, a passport and a certificate of birth or baptism is desirable, but failing these, a certificate of identity, delivered by the applying foreigner's Consul, will be accepted. The applicant must also submit to be vaccinated, or prove that the operation has been performed recently. When all these formalities have been gone through, the foreigner is granted a certificate of residence for which a payment of 2 francs 55 centimes (about 2s.) is charged. If the foreigner moves to another commune or district, the certificate must be endorsed at the Mairie of the new residence. It is important to know also that everyone who knowingly employs a foreigner who has not been duly registered is liable to a fine.

THE MARRIAGE LAW.

The risks run by an Englishwoman who marries a Frenchman without complying with all the regulations of French law as to the consent of parents or near relatives, has often furnished a subject for novelists, and unfortunately romances on this topic are too often founded on fact. There is a great deal to be said for the French law; at least it prevents boys and girls making rash matches of which they, as often as not, repent before long. But it is well to know just what the regulations for a duly legal marriage are. This, together with useful facts about will-making, intestacy, the law as to the payment of the rent of houses, notice to quit them, engaging and dismissing of servants, married women's property, the purchase of real estate, and even the French law with regard to limited companies, will be found in Mr. Browne's book, which also contains in an interesting appendix valuable information as to travelling in France, French weights and measures, and the comparative cost of living at home and abroad. Indeed, this is a *vade-mecum* both for English travellers, and for English residents among our neighbours on the other side of the Channel.

* "French Law and Custom for the Anglo-Saxon: A Guide for Everyday Use." By Arthur S. Browne, Solicitor of the Supreme Court. Second edition, revised and enlarged. Price 2s. 6d. net. London: The Health Resorts Bureau, 27 Chancery Lane, W.C.

NEWS AND COMING EVENTS.

THE new South Eastern Hospital, erected to the plans of Messrs. T. W. Aldwinckle and Sons, architects, London, has been ventilated on the "Boyle" natural system.

SIR WILLIAM JOB COLLINS, F.R.C.S., M.P., will preside at the annual meeting of the Asylum Workers' Association, to be held at the Medical Society's House, 11 Chandos Street, on Wednesday, May 29, at 4 P.M.

THE RIGHT HON. THE LORD MAYOR will take the chair at the Festival Dinner to be held at the Trocadéro Restaurant on Tuesday, June 4th, at 7.30 P.M., in aid of the City of London Hospital for Diseases of the Chest, Victoria Park, E.

THE Bill promoted to obtain the incorporation of King Edward's Hospital Fund for London was before the Examiners of Standing Orders in Parliament this week. After formal proof of compliance with the Standing Orders had been given it was ordered to be reported for second reading in the House of Commons. The measure has already passed through all stages in the Upper House.

At the annual meeting of the North-Eastern Hospital for Children, Hackney Road, Bethnal Green, held on Thursday, May 16, the report showed that the total ordinary expenditure had been £10,927 and the total income £10,083. The chairman stated that since the close of the year the debt resulting from the erection of new buildings had been reduced from £10,500 to £7,500, owing to a generous donation received for the purpose. The great event of last year had been the opening of the nurses' home and the laundry. These buildings had greatly reduced the cost per in-patient per week. It had been decided to make a special appeal for funds. The Lord Mayor had very kindly arranged to preside on May 28 at a banquet at the Mansion House to inaugurate the appeal. It is a remarkable fact that this hospital, with an expenditure of nearly £11,000 a year, has an endowed income of under £250, and that after reckoning the sum arising from patients it is dependent upon voluntary contributions to the extent of no less than £10,000 a year.

THE death is announced of Sir Joseph Fayrer, K.C.S.I., LL.D., M.D., F.R.S., Physician Extraordinary to the King since 1901. Sir Joseph, who first started as an engineering student, was born in 1824, and entered Charing Cross Hospital School of Medicine as a student in 1844. Three years later he qualified, and was appointed medical officer of H.M.S. *Victory*. Later he proceeded to Rome, where he took the degree of M.D. In 1850 he entered the Bengal Medical Service, and saw service in Burmah and during the Mutiny. He was in Lucknow during the heroic defence of the city against the rebels, and during the siege he transformed his house into a small fortress and hospital combined. Hero, too, he was wounded while operating under fire. For his services he was mentioned in despatches and received promotion. After the Mutiny he went to Edinburgh, where he took his M.D. degree. Returning to India he became Professor at the Calcutta Medical College and President of the Medical Board. The latter post he held till 1895, when he retired, receiving a baronetcy the following year. His contributions to medical and general literature have been numerous, and up to his death he continued to take an active interest in his profession. He was a corresponding member of many learned foreign societies, a Governor of Guy's Hospital, and a Governor and Consulting Physician of the Italian Hospital, London.

THE new out-patients' department of the Evelina Hospital for Sick Children, Southwark Bridge Road, S.E., was opened on Thursday, May 23, by the Lord Mayor and the Lady Mayoress.

A BILL is to be introduced by a medical member of the State Legislature in Alabama prohibiting the sale of cocaine and restricting the manufacture of patent medicines in that State.

THE second International Congress of Physiotherapy will be held in Rome from October 13 to 17 next under the presidency of Professor Guido Bacelli. The honorary secretary of the Congress is Professor Carlo Colombo, Via Plinia 1, Rome.

THE Normanton and District Joint Isolation Hospital has been opened. The site cost £1,700, and £15,500 has been expended on the buildings. The latter provide accommodation for 40 patients.

THE University of Jena, which has hitherto only allowed women to matriculate in the department of physiological science, has thrown open its doors to women students in all departments, including that of medicine.

AFTER being for some considerable time in a state of quiescence, after the passing of the plans, a decided move has been made towards the erection of the new infirmary for Alnwick, which it is estimated will cost £6,200, exclusive of furnishings and apparatus.

POST-GRADUATE vacation courses in medicine, in connection with the University and Royal Colleges, will be held in Edinburgh during the month of September. The first lecture will be given on September 2. Full particulars may be obtained from the Secretary, University New Buildings, Edinburgh.

A SKILFULLY organised bazaar, held in the Theatre Royal at Deal in aid of the funds of the local hospital, has realised a sum of nearly £400. One of the features of the bazaar was the model cookery book, edited by Miss McCall and containing a series of admirable recipes contributed by ladies of the district and their friends. A sum of about £25 was realised by its sale.

PRINCIPAL DONALD MACALISTER, M.D., LL.D., D.C.L., will preside at a dinner of the Glasgow University Club, London, to be given in the Trocadero Restaurant, Piccadilly Circus, W., on Friday, May 31, at 7.15 for 7.30 P.M. It is anticipated that the Right Hon. Lord Kelvin, O.M., K.C.V.O., the President of the Club, will be present. Applications for tickets to be addressed to the Honorary Secretaries, 63 Harley Street, W.

THE Albany Guild for the Care of the Sick is a model institution having for its objects "the care of the sick poor in their homes, including the employment of trained nurses, the instruction in home nursing and care of the sick, the preparation of diet for the sick, and instruction in the laws of health, morals, and wholesome living." Its annual report makes interesting reading, and it is instructive to find, by reading it, how much good work the Guild has been able to achieve with the comparatively limited means at its disposal.

NURSING ADMINISTRATION.

PRELIMINARY TRAINING FOR PROBATIONERS.

THE fact that the best working years of the nurse are over soon after 40 is a factor in determining income, which is the more serious from the age at which the nurse is able to begin her training. Can nothing be done to advance the time? Is there no part of the nurse's training which can be carried out before she enters hospital? To the first question the more strongly it is urged the more decidedly do the best authorities give a negative reply. No ordinary girl, and hospitals cannot deal with exceptions, is fitted before she is 22 or 23 to undertake the responsibilities which fall to the lot even of the probationer. With regard to the second question, there is more diversity of opinion. The desirability of some practical preparation of the probationer for the duties she will be called upon to perform is recognised in several hospitals, and in two at least—the London Hospital and Guy's Hospital—a preliminary course in a separate training school attached to the hospital is enjoined on all probationers. The drawbacks to this system are chiefly financial. It involves the maintenance of a separate building and staff, and the charge, which cannot exceed a guinea a week, is insufficient to defray the entire expenses of board, lodging, and instruction. For this reason alone it is improbable that the system of preliminary pupil schools will ever become general. Moreover, the charge, insufficient as it may be to defray the expense of the school, is more than many pupils can bear, and thus the choice of probationers is limited to those who can pay. Finally, it may be contended that the preliminary training afforded in a period of six weeks or three months does not go far enough. Too many subjects are crowded into the time, and yet to make the course longer is not only to increase the financial difficulty, but to run the risk of spoiling the freshness with which the probationer ought to attack her term of training, and the loss of which is ill-compensated by familiarity with routine. Is it necessary to subject the pupil to the expense and inconvenience of residence in order to impart the instruction which is the recognised preparation for a probationer's duties? The system practised at the Glasgow Royal Infirmary, where a complete course of training is given to intending probationers before they enter the wards, is in our opinion greatly to be preferred, the pupils either living at home or making their own arrangements for board and lodging during the continuance of the classes. In London it would require but little organisation to provide preliminary classes for all intending probationers, and the advantages which would be afforded without expense or trouble to nursing in general are readily apprehended. There is little doubt that the County Council would cordially co-operate in any scheme which had the approval of the hospitals, and would furnish at one or two convenient centres classes for intending nurses at minimum fees. Already under the Science and Art Department there are courses of instruction in

physiology, anatomy, and hygiene which are too much ignored by hospital authorities. It remains to supplement them by courses arranged with a view to the manual work which the first year probationer ought to be skilled to perform on her first entry into the wards. The elementary work of sweeping, dusting, and cleaning; the care of bedding, and the special making of beds; the use and care of the thermometer; bandaging and the preparation of bandages and dressings; the making of sponges and pads, and the padding of splints; principles and practice in cleansing instruments, and generally in keeping metal work in good order. These are only a few of the practical details which should be familiar to the pupil, and in which considerable practice is needed before skill is attained. In addition to this practical course, should not the intending probationer be advised to go through a course of lessons in sick-room cookery and in massage or dispensing? It is hard upon a nurse, after three or four years' training, to be compelled to lose time before commencing her career, in learning things which she might quite suitably have been taught while she was waiting for admission to the training school. It is only because before entering hospital she was not alive to the importance of a knowledge of massage or dispensing that she omitted to acquire these arts, the possession of one or other of which may make all the difference in her ability to obtain some coveted post. Either branch of the work can be readily mastered by a girl of 18, and it is needless to say that such subjects as hygiene and anatomy are far more easy of assimilation by pupils able to devote some serious leisure to their study than in the hurry and worry of hospital life.

Two possible drawbacks suggest themselves to the preliminary instruction which we should like to see imposed upon all probationers before entering any hospital. The first is that wrong methods, difficult to eradicate, might be imparted to the pupils. This, however, if the classes were held under the direct sanction of the training schools, could not occur. In fact, the instruction given by an expert lecturer would be far above the level of that usually available for the unlucky probationer in her first few months, whose mission is to get in everyone's way, and find herself perpetually blamed for ignorance of things it has been no one's duty to teach her. Secondly, it will be urged that by means of such classes a new terror in the shape of an amateur nurse would be set loose upon the public. To guard against this danger, it would certainly be necessary to exclude from the instruction given any reference whatever to the treatment of disease. Medical and surgical nursing, the use of technical, medical, and surgical appliances, must be rigidly reserved for the time when practice can be wedded to theory. It is in the theoretical teaching of such subjects alone that danger lurks. It can do even the most blundering amateur no harm to be able to name her own bones, roll a bandage, and make a bed.

THE COMMON TASK.

Correspondence and Queries for this section should be sent to the Editor of THE HOSPITAL, 28 Southampton Street, Strand, London, and marked "Nursing Administration."

WARD DUTY AND THE PRIVATE STAFF.

Is it desirable to use the private staff attached to a general hospital as a reserve for special cases and for filling the vacancies caused by nurses on leave? This is a question which meets with very different replies. In some London hospitals the private staff is worked in close connection with that of the hospital, and the frequent return to the wards of the nurses sent out by the hospital, whereby they are kept in touch with the newest methods, is advertised as a distinct advantage to the public. The nurses as a rule regard it as a favour, and there is so much to stimulate and interest in the wards that a skilled nurse will even take up probationer's work for a short period in order to return to the atmosphere she loves. It is very different, however, in provincial hospitals. There the introduction of members of the private staff into the wards is seldom an unmixed boon. It may be good for the nurse, but as she is generally unaware of this fact, and somewhat reluctant to return to a routine and discipline from which she considers herself emancipated, she is apt to prove a very unwelcome feature from the point of view of the ward sister. The tone of the ward suffers, and even the patients are conscious that the temporary nurse finds them uninteresting, and has no particular motive for doing her best. In one provincial hospital, these drawbacks are being felt so strongly that an effort is in progress to sever the private staff definitely from any connection with the ward work, and this although the general tone of the training school, as well as of the private staff, is exceptionally high. The abiding difficulty in provincial hospitals is the over-importance of little things, and it is exactly in this direction that the return of the former probationer to her old ward is apt to tell injuriously. Instead of being absorbed into what Henry James, on the brink of a mighty river, happily described as "the large indifferent ease in its pace and motion as of some great benevolent institution smoothly working," the private nurse is altogether too prominent and self-important, even with the best intentions, when she picks up old duties, unmodified by the smallest variation in theory or practice. It would be interesting to know the general experience of superintendents of nurses in this connection.

THE HOSPITAL GARDEN.

The dearth of profitable gardening in hospitals has always been a source of surprise to those who know how very easily a patch of ground may be made to bear a rich return. While large sums are spent over and above what is necessary year by year on meat, the amount spent on fruit and vegetables is curiously inadequate in many institutions for the wellbeing of the inmates. It matters little that

patients may be provided with no vegetable but potato, since their stay is often confined to three weeks or a month, during part of which they are probably on very restricted diet. But for the health of the workers a varied supply of vegetables and fruit is absolutely essential, and we have been astonished to look through the accounts of hospitals, liberally victualled in other respects, and note the parsimonious dimensions of the greengrocer's bill. What can be done in hospital gardening is shown by the Royal Hants County Hospital at Winchester. The garden is charmingly situated, sloping away from the main building, and flanked by spacious lawns where the patients can sit. It is well stocked with fruit trees and a plentiful supply of gooseberries, currants, strawberries, etc., is available for nurses and patients, with sufficient surplus to make jam for the whole household for the year. Of ordinary vegetables there is no stint, and in due season the staff and patients alike are regaled with green peas, beans, and other garden delicacies. One gardener and a boy suffice to deal with the vegetable garden and the hospital grounds, and a good variety is maintained all the year round. The excellent plan is adopted of buying in the garden stuff at market prices and reckoning this off against the cost of labour, seeds, manure, etc. In this way all the profit made on the garden is brought to light, and, what is even more important, the exact cost of provisions is ascertained. Naturally, as the supplies are home-grown, the vegetable and fruit account is comparatively high, the hospital being able to afford liberal allowances of their own produce. In London, where fruit and vegetables are cheaper than in any part of England, it ought to be possible to provide continual variety of vegetables for the staff, and fresh fruit ought not to be absolutely banished from the dietary. An apple apiece for breakfast every morning would prove a great help in keeping a big household in health, and it is a little luxury which can be obtained at very small cost, throughout the greater part of the year.

ROBERT BURNS' NURSE.

A pretty compliment was paid to some district nurses in Scotland the other day on the ground of their connection with the birthplace of Jessie Lewars, to whom Burns wrote one of his happiest lyrics. His lines to her on her recovery from a dangerous illness are less well known:—

But rarely seen since Nature's birth
The natives of the sky;
Yet still one seraph's left on earth,
For Jessie did not die.

He greeted her with these lines on her first appearance after her illness, saying, with a smile:—"I knew you would get better; you have much to do before you die, believe me." And the work she had to do, the work through which her memory lives, was to nurse him in his own last illness, and close his eyes in death.

EDITOR'S LETTER-BOX.

[Our Correspondents are reminded that prolixity is a great bar to publication, and that brevity of style and conciseness of statement greatly facilitate early insertion.]

COTTAGE HOSPITAL PRACTICE.

BILL BERRY writes:—Can you or any of your many readers kindly assist my committee with practical advice on the following matter of hospital administration?

Our cottage hospital is used for the general objects and purposes of such an institution, and is managed by a committee. Patients of the usual kind are admitted, with or without weekly payment according to the recommending committee-man or the committee themselves consider they can afford.

The medical staff of the hospital consists of those practitioners who live within a ten-mile radius, and the one local doctor, who resides in the village in which the hospital is situated. The former are not paid, but the latter receives a fixed remuneration for the performance of certain duties specified in the by-laws. The patients can be attended by their own doctors if on the staff.

The majority of cases are sent in by the local practitioner. A bad accident happens in the immediate neighbourhood. The victim, who is in a fairly well-to-do position, is carried into the hospital late in the evening. His regular medical attendant lives some miles away, but is on the staff, and is sent for by the patient's friends. He comes over, performs

The committee meet in the meantime, consider the case, successfully until it is discharged off the books.

The committee meet in the meantime, consider the case, and impose a weekly payment from the patient or his friends.

The patient's doctor, on the termination of the case, sends in to the patient privately his bill for attendance, after expressing to the Secretary of the hospital his intention to charge.

Should the doctor be permitted to charge the patient under the circumstances, or, if not, how can the committee prevent it?

It may be added that the committee do not grudge the doctor his private charges on the patient in this particular case, but consider they were well earned; but their point is rather, Should a patient, who is brought into a charitable institution and had a weekly payment supposed to be commensurate with his means put upon him, be charged by his own doctor, who is an *honorary* member of the hospital's medical staff?

And this seems to lead to some further points, namely: If in one case a patient is permitted, with the knowledge of

the committee, to be charged by his medical man attending him, why should not another case be similarly treated, even though the latter may not be so well able to afford payment? If a doctor on the honorary staff attending a patient in the hospital sends him in a bill for attendance without reference to the committee and receives payment, will not this come within the Prevention of Corruption Act, 1906? And, finally, May not the committee, who are simply trustees for carrying out a benevolent trust, who connive at a practice of a member of the medical staff charging a patient privately be sailing close to the wind under the same Act? Scores of somewhat similar cases of emergency admissions must have occurred at cottage hospitals up and down the country, and it would be very interesting and instructive to have the views of those experienced in the details of management of these very useful institutions.

General Practitioners' Contributions.

Important.

We propose to devote a special page to General Practitioners' Contributions. We therefore invite from practitioners contributions based upon their experience in the management of cases, and in the treatment and diagnosis of disease; especially shall we be prepared to welcome articles dealing, practically, with treatment, and with the use and value of new remedies and methods.

No article should exceed 1,100 words in length, and, if accepted, one guinea will be paid to the writer after publication. Each communication should be accompanied by a stamped directed envelope for the return of the MS. if found unsuitable.

Notices and Answers to Correspondence.

All MSS., letters, books for review, and other matters intended for the Editor, should be addressed to THE EDITOR, The Hospital Building, 28 and 29 Southampton Street, Strand, London, W.C.

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The Hospital

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METABOLISM IN HEALTH AND IN DISEASE.

METABOLISM—that is to say, the chemical changes that occur in the food from the time it is ingested until its end-products are eliminated from the system—lies so absolutely at the root of all life, whether healthy or diseased, that no medical man can afford not to know as much about it as is possible. It does not follow, of course, that because the metabolism of a particular man or woman is wrong that the best thing to do is to take steps to alter it. In many cases the patient's metabolic processes, wrong though they are, are the best that the patient's body is capable of under the circumstances; but to realise whether this is so or not, the patient's medical adviser must know all he can about metabolism, or else he will not know what should be left alone, and what would be the better of modification by some dietetic, medicinal, or other means to hand. It is further necessary to know a great deal about metabolism to prevent the development of faddisms in diet rules. Faddists, as regard diet, are nearly always those who know one aspect of metabolism only; such faddists upon the subjects of uric acid metabolism, or of intestinal toxæmia, to take two examples, are too common; they would be less common if they had a broader view of metabolism, and they would learn that the important things are: not *what* you eat, but *when* you eat, *how* you eat, and *how much* you eat. There are very few foodstuffs which cannot be properly metabolised in some degree by everyone; it is the amount which should be taken which needs modification. Even in diabetes mellitus, for example, a certain amount of carbohydrate should be allowed to every patient to get the best result, but the best result will be obtained with less carbohydrate in one case of diabetes than in another.

Views upon the question of meat diet in renal cases have undergone immense changes of late years, and the reasons for these changes depend upon the results of metabolism research. We have not space to elaborate the subject, but it must be clear to all that metabolism in disease, in its differences from metabolism in health, is a most important branch of medical study.

The main trouble is that metabolic studies, both in physiology and in pathology, are of comparatively recent date, and the papers upon the subject are

scattered far and wide throughout the literature of Europe and America. The text-books of physiology have collected together the main points about metabolism in healthy persons and animals, but hitherto there has been a great need for a similar action in regard to metabolism in disease. This need has been supplied by Professor Von Noorden and his collaborators in the book which we review upon page 235. All the various papers bearing upon the matter have been carefully collected, and, what is more important still, they have been sifted, and the good picked out from amongst the bad. This sifting is a most laborious process, for so many indifferent papers are printed nowadays; even now we are bound to say that much is left which will need a further sifting in years to come. The busy practitioner will be apt to say that he cannot find his way amongst all the pros and cons that are adduced for each small point that is argued in the book; nevertheless, it is only by studying the pros and cons that the value of particular views can be arrived at, and to few questions in metabolism can the answers be dogmatic.

There are many side issues arising out of research work of any kind; chemical pathologists, in their endeavour to throw light upon the causation of diseases, have again and again discovered points which are of the greatest value to clinical physicians and surgeons. It is to recent researches upon metabolism that we owe our knowledge of the importance of diacetic acid, acetone, and oxy-butyric acid in the urine in cases of diabetes; the relation of these substances to the incidence of coma; and the prophylactic measures, such as the administration of sodium bicarbonate, which may be adopted to ward off the coma. It is to metabolism work that we owe the many different methods we now have of diagnosing pancreatic diseases with much greater accuracy than formerly—by chemical examination of the fæces, for example, or by the administration of keratin-coated capsules, which are digested only when the pancreatic juice is active, and so on. The inability of the diseased kidneys to excrete sodium chloride properly has been known for years in Germany, though it has only recently been recognised in England; the side issue of this metabolic fact is its immediate bearing upon the dropsy

of renal cases and the power we have to check or limit this dropsy by modifying the sodium chloride ingested by these patients. Theories upon intestinal toxæmia have shown a tendency to run riot of late years, but unbiassed workers in the laboratories have been investigating the matter, and it has become increasingly clear that this toxæmia is by no means proved even to exist at all, still less to be the cause of all the troubles that have been attributed to it. It is most useful to have chemical data for verify-

ing or refuting bedside theories, either of pathology or of treatment, and it is essential that the medical man should try to keep abreast of the main results that are being found. For some years past pathology in England has been almost synonymous with bacteriology, but pathology has other aspects also, and the least known of these is the chemical or metabolic aspect. We are very fortunate in now having a really good book upon the subject in the English language, albeit a translation from the German.

ANTHROPOLOGY.

THE announcement that the Cambridge Board of Anthropological Studies has recommended, in a special report to the Senate, the establishment of a Diploma in Anthropology, will be received with gratification by all friends of the University, and with equal satisfaction by those who are interested in the extension and development of higher education. The neglect of the study of anthropology, as a science and not merely as an absorbing hobby, at most of our universities is a matter for regret, and this step of recognising the study as one that should have its place in the scientific curriculum will meet with the approval of all thoughtful men. There is little need, in a medical paper and to medical readers, to emphasise or lay stress upon the importance of the study of what Virchow, himself one of the foremost anthropologists of his day, called "the most fascinating of sciences." The practical advantages such study offers may, it is true, be few. The scientific anthropologist may find it impossible to make a living by his knowledge of the science: and that, in our days when most studies are valued at their commercial price, may in itself be a drawback. But to those of us who agree with Milton that "not liberal indeed but illiberal must be the mind that mounts in contemplation merely for money," anthropology must of necessity offer many points of interest, of value, and of solid usefulness.

The proper study of mankind, as Lucretius pointed out and Pope after him, is man himself, his race, his development, and his reaction to environment. In its best, its most liberal interpretation, that is the meaning which may be assigned to the word "Anthropology." It is not a mere study of the cranial development of aboriginal races, an anthropometric survey of any particular tribe, or a statistical enumeration of ethnological data. It is the sympathetic, broad-minded, and, at the same time, scientific study of the human race in all its varied aspects. As such it appeals particularly to the medical man and the medical student. Only by correlating and carefully sifting all the available data can we arrive at a proper knowledge of certain outstanding questions of, for instance, racial sus-

ceptibility to disease, the evolution of mind and the origin of social conditions. Excellent work has been done in the past by missionaries, by enthusiastic general practitioners abroad, and by equally enthusiastic experts at home, but such work has, to a great extent, been sporadic, and has hitherto failed to receive the official recognition that it merited.

Most of our larger museums contain anthropological and ethnographical collections which will be of undoubted value to the student who desires to avail himself of the facilities which, it appears, Cambridge, itself the fortunate possessor of one of the finest anthropological collections in the kingdom, offers to the intending Diplomate in Anthropology. Here and there, too, workers are adding to the known data, and increasing the facilities for definite study and original research. At University College, for example, Professor Karl Pearson's admirable work in the department of National Eugenics has already borne fruit, though much, very much, remains to be added to it before we are in a position to estimate it at its proper worth. On the Continent various workers have been active on similar, or analogous lines, and he who would give us a survey of what has been accomplished so far, collating the findings of these various investigators, will do a work for the accomplishment of which scientific men will feel cordially grateful.

So far as the report of the Board goes, it would appear that the aspirant for the Diploma in Anthropology will not be confined to one subject, nor will his researches be limited to one branch of a study which is so complex and so wide ranging. He is to be left free to pursue his own bent, and to strike out in any line he wishes. That is a decision which is eminently praiseworthy. To have given the candidate set work, to have limited his choice of investigation, or to have narrowed his field of activity, would have been to stultify much of the good intention of the recommendation, which is, as we take it, to encourage original work by recognising the manysidedness of the study to which the aspiring diplomate will have to devote himself.

ANNOTATIONS.

The New Anti-Opium Remedy.

FROM Mr. L. Wray, Director of the Museums of the Federated Malay States, comes the news—welcome if the claim can be substantiated—of the discovery of an effectual cure for the opium habit. It consists of a decoction of the leaves of a climbing plant, *Combretum sundaicum*, mixed with a certain quantity of the roasted opium the smokers use. By an arrangement of doses the patient takes a daily decreasing quantity of opium and a daily increasing quantity of the *Combretum* decoction. The result, it is said, has been so successful that nearly 400 opium smokers have abandoned the habit, and the official import returns for the district where it has been used show a decrease of over 30 chests of opium per month. The discovery, we are informed, was made accidentally by some Chinese wood-cutters, who, running short of tea, made shift with the leaves of *Combretum*, and observed that it induced a distaste for the "smoke." The last word on the drug habit, whether the drug be alcohol or opium, will probably be spoken when we can substitute for these deleterious narcotics a nerve stimulant as safe as tea and coffee. And it is possible that in the *Combretum* we possess a new alkaloid having the pleasant and beneficial qualities of opium without the pains De Quincey wrote about so eloquently. As everyone knows, among the nations of North-Western Europe, although alcohol is taken with safety by a large majority of people, yet there is a certain proportion whose unstable nervous system renders them an easy prey to alcoholism. If in the new opium remedy we are fortunate to have hit upon an agent which can also satisfy or destroy the cravings of a drunkard for alcohol, then the discovery will rank as an achievement. It is to be hoped, therefore, that an immediate trial of the *Combretum sundaicum* will be made in this country, not only in the treatment of the opium habit, but also in that of chronic alcoholism.

Professor Cushny on Drug Standardisation.

IN his evidence recently given before the Royal Commission on Vivisection Professor Cushny, of University College, advances further facts in support of the contention that standardisation of certain drugs and their preparations is an absolute necessity if accurate and precise methods of treatment are to be promoted. For example, he has found that of two specimens of tincture of digitalis obtained from a firm of repute and standing the one was four times as strong as the other. Even worse is the state of matters in regard to ergot, as tests have shown that a large proportion of the drug distributed through the usual commercial channels is absolutely inert, and preparations made from such samples must, of course, be useless. Again, Dr. Cushny related from his own personal knowledge an instance in which a quantity of cannabis indica, not less indeed than 20,000 lbs., was offered to a firm of manufacturing chemists, who, before purchasing, had a specimen of the drug tested on animals, and found it entirely inactive. Such possibilities as these must force on the attention of the profession the

absolute need of securing for a number of drugs in common use some official test or standard. Otherwise, it is obvious that many remedies ordered by the physician must be, without any fault or neglect on the part of the pharmacist, altogether unreliable. It is the duty of the national Pharmacopœia to secure uniformity in medicines as ordered by the physician. Pharmacologists now tell us quite definitely that in a number of drugs this can only be secured by fixing a standard based on physiological tests. Neither physical nor chemical tests are sufficient. In view of this it is manifest that the Pharmacopœia must provide for certain drugs an estimate of physiological values. Some little time ago the Therapeutical Society sent a resolution to this effect to the General Medical Council. It is essential that the dangers of the existing situation be pressed on the Council, and thus we are glad to see Professor Cushny's endorsement of the claim so presented.

Hospital Appeals and the Central Funds.

THIS week we are issuing, as usual, a Special Hospital Sunday Number, dealing by illustrated articles with a retrospect of hospital history from the earliest times. The Hospital Sunday Fund has issued an appeal to the wealthier residents of the metropolis, in the form of an illustrated and highly-coloured card, which is forcibly written and well brings out several striking points in support of this Fund. We are convinced, however, that it is the right policy for the King's Fund and the Metropolitan Hospital Sunday Fund to abstain from issuing general appeals to the public at large, for they entail great expense, and are regarded by the hospitals as interference in the field which directly belongs to them. The general public, too, have great objections to this class of appeal by the Central Funds. The King's Fund is regarded with great confidence, and the newspapers generously afford ample opportunity to the Council to bring its claims periodically before the people who do not, it is true, at present individually subscribe annually to this Fund to the extent they undoubtedly ought to do. So far as the Sunday Fund is concerned, the issue of general appeals is apt to make people feel that Hospital Sunday as an institution is not, as it ought to be, tied up and confined to places of worship, for the Council have now gone outside the churches to approach the householders, as individuals. The effect of a general appeal in the case of the Sunday Fund may therefore prove injurious to the collections in places of worship. If so, it will be because people at large who support the hospitals through this Fund, as apart from their private gifts to individual institutions, resent a direct appeal from the central office for the reason just given. We further consider that neither fund is justified in spending money in advertising an annual subscription, except in the year in which it is given for the first time. We believe that a change of policy in this respect would tend to considerably increase the number of new annual subscribers which both funds would be glad to secure.

MEDICAL OPINION AND MOVEMENT.

An interesting discussion took place at a meeting of the North of England Obstetrical and Gynaecological Society on the treatment of eclampsia. It was generally agreed that no great advances had been made in our knowledge of the disease and its treatment. More rational methods of treatment have, however, undoubtedly followed the view that it is a toxæmic condition, and that measures should be directed towards the elimination of the poison. Such means consist in promoting diaphoresis, saline infusions, saline rectal injections, and lavage. The convulsions should be controlled by morphine and chloroform, and the onset of labour hastened. There was a consensus of opinion against *accouchement forcé*. Rupture of the membranes, dilatation of the cervix, acceleration of delivery, and forceps rather than version, were generally approved. Dr. Stookes showed from statistics that there has been a considerable increase of the disease during the last ten years, and he ascribed this to the increase of intestinal affections.

It frequently happens in the surgical wards of the hospitals that patients have to be detained during convalescence for a prolonged period on account of some necessary surgical care, although possibly of a trivial nature, or owing to an urgent demand for beds a patient may have to leave the hospital while some such care is still needful. In order to provide for these cases it has been proposed to establish, in connection with the London Hospitals a surgical home of recovery in which the surgical treatment of convalescents can be effectively carried on. A meeting was held this month at the Mansion House by Alderman Sir Walter Vaughan Morgan, in aid of the movement, and representatives from most of the London hospitals were present, as well as Mr. Mayo Robson, Mr. Stephen Paget, and Sir Alfred Fripp. The home has been incorporated under a trust, with Her Royal Highness Princess Louise, Duchess of Argyll as President. An appeal is now being made for the sum of £30,000 to build and start the home, and it is to be hoped that the movement will receive the support it deserves.

THERE will probably always be some differences of opinion in regard to the question of operative interference in appendicular conditions. At the present time there is no doubt that a large number of appendices are removed, which might quite well have been left alone, and, on the other hand, lives are still lost through delay in operating. Signs and symptoms are so often misleading that even the elect cannot fail to be deceived sometimes, and the opinion of an individual surgeon must vary from time to time according as his immediate experience has tended in the one direction or the other. At present there is a tendency among French medical authorities towards the more conservative treatment, and Dr. Saint René Bonnet of Chatel-Guyon-les-Bains champions this view, and especially deprecates removal of the appendix in cases of muco-membranous entero-colitis with appendicular symptoms. He claims that these cases yield to

medical treatment, and that the entero-colitis is not cured by removal of the appendix. On the other hand, M. Richelot maintains that such intractable intestinal complaints are often cured by the removal of an appendix, and he supports his view by many cases which have been successfully treated in this way.

THE bacterial origin of acute rheumatism cannot be said to be yet definitely determined. Several observers have from time to time succeeded in isolating a streptococcus from cases of the disease, and five or six years ago, owing chiefly to the researches of Poynton, Paine, Walker, Beaton and Ryffel, there seemed good prospects that the question would be speedily settled and the specific organism clearly identified and labelled. In a recent paper Dr. E. W. A. Walker, who by his researches has made the subject peculiarly his own, reviews the whole question from a thoroughly scientific and unbiased standpoint. Poynton and Paine succeeded in isolating a streptococcus in some 30 cases of acute rheumatism, and obtained all the manifestations of the disease by inoculations in animals. Walker and Beaton isolated a similar organism from 15 cases, and they obtained similar results to Poynton and Paine on injecting cultures of the organism into rabbits. Fever, acute poly-arthritis, endocarditis, and pericarditis were manifested.

IDENTICAL results were also obtained by Dr. Vernon Shaw, working with the same cultures on rabbits and monkeys. Considerable difficulty has been encountered in the attempt to establish distinguishing features between this so-called micrococcus rheumaticus and other streptococci. Walker and Ryffel were able to show, however, that when this organism is grown in highly alkaline media, a considerable amount of formic and acetic acid are produced, and they determined the amount in relation to the alkalinity of the medium. On the other hand only very small amounts of formic acid are produced by other strains of streptococci. Incidental to this research these observers examined the urine of patients suffering from rheumatic fever, and found abnormal quantities of formic acid present, amounting to as much as 0.25 gram in a day's urine, while, according to Von Jaksch, the total amount of fatty acids in normal urine is no more than 0.05 gram per day. It was found moreover that the effect of treatment with salicylates was to cause a rapid fall in the formic acid excretion. All these facts seem to harmonise very prettily. But recently Bulloch and Thompson have carefully investigated the subject anew, and examining 14 cases during life and 20 cases after death, they have failed to discover any organism. Cole, Philip and others have met with similar results. From clinical and pathological aspects there can be little or no doubt that the disease is due to an infective micro-organism, probably of an "attenuated" nature, but the identification of the organism must still remain *sub judice*.

HOSPITAL CLINICS.

SOME COMMON SKIN AFFECTIONS OF THE FACE.

By G. NORMAN MEACHEN, M.D., B.S., M.R.C.P., Physician for Skin Diseases, the Prince of Wales's General Hospital, etc.

A Lecture delivered at the North-East London Post-Graduate College.

GENTLEMEN,—Such is human nature that many a skin eruption will be cheerfully borne, or, at any rate, tolerated, as long as the face is spared. Once let the complexion be affected, especially in sensitive individuals, and the demand for speedy relief is at once loud and persistent. The same feeling which leads the wounded animal to avoid the company of its own species and to hide away in solitary retirement, and also induces man, when his countenance is no longer pleasant to look upon, to shrink from society and to cover over any facial defect or blemish as efficiently as possible.

There are several reasons why the face is specially liable to cutaneous disorders. It is continually being exposed to the atmosphere with its contained impurities and to varying climatic conditions—to the scorching rays of the sun or to the biting east wind. For cosmetic purposes it is subjected by many people to extraordinary and wholly unnatural treatment with soaps, washes, and powders, many of which may be highly irritating. The process of shaving, in the male, opens the door to endless possibilities of infection. Moreover, from the anatomical standpoint, the skin of the face presents some peculiarities. The epidermis is relatively thin, while the sub-epidermic plexus of blood-vessels contains a great number of capillaries. To the richness of the vascular supply of this region is owing the rapidity with which wounds of the surface heal, while, at the same time, the intimate connection that exists between the cutaneous vessels and those of the stomach is responsible for many of the symptoms—*e.g.*, flushing after meals, which characterise diseases of the skin affecting this part of the body.

A CLASSIFICATION OF FACIAL SKIN LESIONS.

For practical purposes, we may classify the facial dermatoses under four main headings:—(1) Congestive; (2) inflammatory; (3) parasitic; and (4) neoplastic.

In the first group we must place those affections which arise from the absorption of some toxic material from the alimentary canal, or which proceed from a disordered state of the stomach. These are certain of the erythemata and also *rosacea* in its early stages. Morbid flushing after food or taking hot liquids is frequently associated with, and furnishes an indication of, a condition of chronic gastritis or flatulent dyspepsia. This may ultimately develop into a more or less pronounced *rosacea* which later may exhibit hypertrophic changes, together with the formation of teleangiectases. From such a state it is but a small step to actual inflammatory change. We then get definite acneiform papules or pustules super-added, and in the more advanced cases the involved skin becomes chronically indurated. I do not mean to say that

all cases of *rosacea* are dependent upon gastric disorders, but it is very common to obtain in such a history of indigestion and especially of constipation. The connection of this affection with chronic indulgence in alcoholic liquors is popularly supposed to be very intimate, but I have already shown that many of the sufferers therefrom are quite innocent of this form of intemperance.* Constitutional treatment is absolutely essential in all cases, and without it, local applications will signally fail. Calamine lotion is useful in cases where there is much inflammation, otherwise weak solutions of ichthyol may be applied, after which ointments containing 20 grains of ichthyol or precipitated sulphur, preferably the former, with 10 grains of zinc oxide in an ounce of lanoline or vaseline, are lightly smeared over the affected parts. For immediate results, painting with a solution of adrenalin, as suggested by W. J. Munro, may give a temporary *anæmia*. Any pustules require treating antiseptically.

COMMON ACNE.

Common *acne* is, perhaps, one of the most frequent, and when severe, is also a most disfiguring affection of the facial integument. The familiar "blackhead" is a source of much annoyance to adolescents, and many are the despairing attempts to extract them by the traditional watchkey, but it more often than not happens that, by unskilful manipulation, supuration is induced in the follicle, leading to the development of an ugly pustule. The sudden outbreaks of *acne* upon the forehead after eating a quantity of biscuits or rich puddings are rather curious, and make one think that the pathological basis of the affection is, perhaps, something more than a mere blockage of the pilo-sebaceous follicle. A large number of the cases are closely connected with seborrhœa of the scalp, and the researches of Gilchrist, of the Johns Hopkins University, who found in the *Bacillus acnes* in the lesions, and this micro-organism, by the way, has been shown to be identical with the micro-bacillus of seborrhœa (Sabouraud), a fact which serves to explain this close relationship. The *acne*-pustule, of course, contains pyogenic cocci. *Acne vulgaris* is not necessarily dependent upon any gastric derangement, though constipation is a common enough accompaniment of the disorder. Local treatment is nearly always successful, especially before the pustular stage is reached. All the comedones should be extracted with a proper extractor, of which many good patterns are sold. The face may be well steamed at night, and may afterwards be gently rubbed with a flannel and good soft soap. A lotion of

* "Brit. Journ. of Inebriety," April 1904, p. 274.

sulphur or ichthyol may then be applied. It is a good practice to touch any obstinate papule with a pointed wooden match dipped in pure phenol, or, if preferred, in a mixture of equal parts of powdered camphor and phenol which does not leave a white mark, and also to open any pustule that may be present. Both the *x*-ray and the vaccine treatment of acne should, I think, be reserved for those cases where all the ordinary remedies have been well tried and have not proved successful.

ECZEMA OF THE FACE.

Eczema attacks the face in many different ways. In infants we have the familiar impetiginous variety with much weeping and crust-formation, the latter produced largely from rubbing and chafing. Then we see the small, disc-like, nummular forms of *eczema squamosum*, so common in school children. This type is frequently mistaken for ringworm, but a surface-scraping shows no spores or mycelium. In adults the acute erythematous variety is, perhaps, more frequent than papular forms. At all ages the condition may be accompanied by *seborrhœa capitis*, and it is rather a useful thing to know that the post-auricular region is nearly always involved if the case be primarily one of *seborrhœa*. Nasal catarrh or rhinitis furnishes another form of *eczema*, which is, at first, localised around the anterior nares, but which soon spreads to adjacent parts of the face. It is sometimes most difficult to determine which is the primary condition in the case of a very *eczematous*-looking ear—an *otorrhœa* or an *auricular eczema*. Again, some cases of so-called *erysipelas* of the face are really nothing more than an acute erythematous *eczema*. A curious sort of *eczema*, half-dermatitis and half *seborrhœa*, is often seen upon the forehead and temples, encroaching upon the hairy scalp, and resulting from irritating hat-bands. Whatever be the type of the disease, we have first to consider what is the underlying cause, and then to soothe any inflammatory process that may be present. The *seborrhœic* cases require the special treatment of the scalp which I have previously discussed here. The best all-round lotion is one of calamine, which should not contain much glycerine if the *eczema* be acute and weeping. The *lotio plumbi* may be added to it with advantage, and as the case progresses towards recovery, a little weak *cyllin* or a few drops of the *liquor carbonis detergens* may be used instead. The *oleates* of bismuth and zinc with the oxide of the latter metal, and the acetate of lead, alone are permissible in the acuter stages, but a little *ichthyol* may be allowed later. If the *impetiginous* element predominates, five to ten grains of the ammoniated mercury may be added to the ointment. No soap must be employed at all, but bran or oatmeal may be used in warm water with a little fresh cow's milk for bathing the affected parts.

PARASITIC AFFECTIONS.

Many of the strictly parasitic affections of this region may, of course, be much inflamed, as, for example, *sycosis* due to the *trichophyton* fungus. As a rule, however, *hyphogenic sycosis* is characterised by more lumpiness and less pustulation than the *coccigenic* variety. The affected

hairs in the beard or moustache region will generally come out easily upon gentle traction, and their sheaths may appear thickened even to the naked eye, whilst under the microscope the fungus can be identified and stained if necessary. It is necessary to exercise some caution in the diagnosis of *sycosis*, as *syphilis* may present a very similar appearance; hence, it is well to inspect other regions of the body, such as the tongue, the shins, etc., and to inquire if there are any other patches elsewhere. On the other hand, a non-parasitic *sycosis* may be accompanied by much *seborrhœa* of the scalp or adjacent hairy parts of the face. For ringworm of the beard, the dilute nitrate of mercury ointment is useful, combined with clipping short of the affected hairs and their epilation, as far as possible. In *coccigenic sycosis*, antiseptic lotions of *cyllin* and ointments of sulphur, carbolic and salicylic acids are good applications.

The common circular patches of *tinea circinata* upon the forehead or chin are easily cured by rubbing in ammoniated mercury ointment, before which one application of tincture of iodine may be made. At the same time it is important to examine the scalp very carefully for unsuspected patches of *tinea tonsurans*. Among the neoplastic affections *lupus vulgaris* is one of the most disfiguring. It requires to be carefully distinguished from *syphilis*, as both these affections present very similar appearances; they each cause loss of tissue, and leave scars. *Lupus vulgaris* may occur at any age and does not tend to such great destruction of tissue as does *syphilis*. On pressing out the blood from the part with a piece of plain glass (a watch-glass or a lens), there can always be seen in *lupus* the characteristic yellowish-brown areas or nodules, which have been likened so aptly to "apple-jelly." In *syphilis* these are not present, and there will generally be other evidences of the disease elsewhere, such as old scarring, quite apart from any history, which may be absolutely worthless. In the child we frequently see *lupus* attacking those of the nervous disposition, with blue sclerotics, fine silky hair, and general frailty, though there are, of course, exceptions. The nose is most liable to be attacked, and then, perhaps, the side of the face in front of the ear, the skin around the mouth and below the eye, in order of frequency. Ordinary *lupus* may become inflamed, and may then weep just like an acute *eczema*, or it may be much crusted over, in which case it may resemble a severe *impetigo*. The length of time that the condition has been present should alone suffice to prevent any confusion with the latter comparatively simple complaint, even apart from a close examination.

The treatment of the tuberculous affections in this region is a big subject. There are those who still maintain that excellent results may be obtained from the older methods, such as scraping, scarification, or cauterising, combined with skin-grafting, if necessary, and I can only say that I have seen and undertaken such operations with success. Recurrence may take place, however, even with the newest methods, but against this fact we have the much better cosmetic results obtained by means of the Finsen light and the *x*-rays. Each case must be

taken on its own merits, and whereas total excision of the affected area might be practicable in one case, in another, exposure to the *x*-rays under the hands of a competent medical radiographer may be the very best form of treatment.

ULCERATIONS.

I will mention *lupus erythematosus* here on account of the diagnosis between it and *lupus vulgaris*. It is unfortunate that the first name of both these affections is identical, for, while bearing in mind the relationships of *lupus erythematosus* to tuberculosis, this disease has nothing like the terrors of its malignant cousin; in fact, there are many points in its pathology which tend to separate it from true *lupus* and to cause it to be grouped among the toxic erythemata. It is not often seen before the age of 25, and it usually begins upon the centre of the nose, spreading laterally in one or both directions in the shape of the well-known "bat's wing." The centre is slightly atrophic, but never so markedly cicatricial as in *lupus vulgaris*, while the advancing border is reddened, slightly scaly, and elevated above the surrounding skin. A better name for this disease is that of Unna's, namely,

"*Ulerythema centrifugum*." The treatment consists in the application of a mild caustic to the advancing border—the mixture of camphor and phenol referred to previously is an excellent paint for this purpose—and in the administration of quinine internally. This drug may be given in full doses, or, if it should not be well borne, then salicin may be tried instead. The bowels should be kept freely open.

Rodent ulcer is another affection of malignant character—I use the term "malignant" here in its specific sense—which commonly attacks the face, the favourite situation being the parts about the internal canthus, and the naso-labial junction. When fully developed the condition should not be easily missed, the characteristically rolled edge, the long duration, and the situation, being the chief points in the diagnosis. A microscopic examination of a portion of the edge will make things absolutely certain. In this affection I think we have in the *x*-rays a really reliable remedy, though a more recent method of cure consists in the electrolytic application of zinc ions. A full description of this method, by Dr. Lewis Jones, was given in THE HOSPITAL of October 20, 1906.

GASTRIC ULCER.

By DAVID SOMMERVILLE, B.A., M.D., M.R.C.P.(Lond.), Lecturer in Public Health, King's College, London; Lecturer in Medical Diseases of the Alimentary Tract, London Polyclinic.

LIKE the poor, gastric ulcer is always with us. As to its causes, a great deal has been written, much of which has not been based upon experimental evidence. Cruveilhier many years ago described the ulcer, and Rokitansky set down an account of it which the text-books have asserted and re-asserted from that day to the present. It has been described as a round ulcer, a punched-out ulcer, and a perforating ulcer. An important point about it is that it is not due to any single cause. The pathologist who expects to locate this condition on a single basis will be disappointed. The chemical side of the subject is extremely interesting, but I cannot dwell upon that now.

When Virchow discovered embolism he immediately associated it with gastric ulcer. It is a human frailty, more or less universal, for a man who specialises to see too many things through the glasses of his particular work, and for years he may be biased as to the very best work of other research students. Klebs urged arterial spasm as a cause of gastric ulcer. We have at present to recognise the fact that we do not know very much yet about its true cause. The question of the increased secretion of hydrochloric acid lies, I believe, at the root of the whole subject. The ulcer is not produced by the ordinary results of inflammation: that is to say, the reaction brought about by an irritant in throwing out a quantity of blood products is not sufficient in this case, and it is well at the outset to make the distinction that the chemical cause of the condition is not one of proliferation of the various blood and tissue products, but the death of tissue. I think that, without the large increase in the secretion of

hydrochloric acid seen in these cases, we could never obtain a gastric ulcer. As to the relation existing between normal tissue and hypersecretion of acid we are no further forward to-day than we were in the days of John Hunter, who 120 years ago explained that the gastric ulcer was produced in those parts of the stomach in which the "vital principle" had failed.

In order to diagnose the condition, and to treat it, one requires some intelligent working formula of etiology. For all practical purposes such a scheme as the following will serve as well as any other: First, one may recognise the condition as produced by impaired vitality due to chemical, thermal, mechanical, or traumatic causes injuring the mucosa. The mechanical impairment has received very little attention compared with the other aspects of the etiology. I have notes of ten cases which indicate that constant repression of the epigastrium has been the starting point of this malady. In these, for a space of several years, no initial symptom referable to gastric ulcer was indicated.

2. Hyperacidity is an all-important factor occurring in conjunction with impaired vitality. It is due to nervous causes, and if the family history be critically examined neuroses of various types may be found for generations before the condition asserts itself. No case of hyperacidity can be found in actual practice apart from such neuroses.

3. Hyperacidity occurs in conjunction with a third etiological factor, namely, altered conditions of blood, quantitative and qualitative, such as are seen in syphilis, anæmia, chlorosis, arterio-

sclerosis, fatty, amyloid, and aneurysmal degenerations of arteries; and various other conditions including malaria, thrombosis, and embolism.

4. Local bacterial infection. During some years' attendance at the post-mortem room of Guy's Hospital I saw nearly 1,000 autopsies. Of these, 40 presented upon ulcers or scars. Welch concluded on an analysis of 32,000 autopsies that gastric ulcer occurs in 5 per cent. of persons dying from all causes. This same observer has shown that direct bacteriological infection cannot be prevented by an excess of hydrochloric acid in the human stomach.

DIAGNOSIS.

The symptomatology is often very direct and simple. There is, to start with, pain of a well-defined type, tenderness located to a very small area (often about the size of a florin or half-crown), and generally situated in the epigastrium about the level of the tip of the xiphisternum in the middle line, or slightly to the left of the middle line. Though the gastric wall has no sensory nerves, it is largely supplied with sympathetic fibres which are in relation with certain sensory nerves in the trunk-wall. Thus there are two "pain points," one in front at the spot above mentioned, and one behind at the eleventh dorsal vertebra, and very slightly to the left. Appetite is never lost, and this differentiates ulcer from chronic gastric catarrh, and from certain infective conditions. The patient abstains from food at times simply through sheer fear of the pain that follows food-taking. The appetite remains unimpaired, and as a rule patients do not suffer from indigestion after a liquid meal, but solids, which stimulate the musculature of the stomach and cause peristalsis, elicit very definite pain. Nausea and vomiting very frequently accompany the pain, but not in all cases. The condition of hæmatemesis is not so common as that of pain, nor is melæna. The latter may occur in such small quantity that microscopic and chemical tests are required to detect it. Much has been done by American research on this point, and it is important to be able to employ the new Aloin test, not only in ulcer, but also in dysenteries and other infections of the small and large intestines. There are many conditions upon which light is thrown by the discovery of hæmatin. In cases in which severe hæmatemesis occurs, as also in those in which nausea and vomiting are frequent, loss of weight and secondary anæmia are evident results.

DIFFERENTIAL DIAGNOSIS.

It is necessary to distinguish this disease from hyperchlorhydria. In hypersecretion of acid the pain is not so localised, nor is it so definite in point of time. In hyperchlorhydria the food requires to be swallowed some little time in order to call forth a flow of hydrochloric acid. As the acid increases, so does the pain until in an hour or an hour and a half there is produced a maximum of pain. There is no such curve with the pain of gastric ulcer. Attention has recently been drawn to a method of diagnosis through the introduction of orthoform; in hypersecretion, gastralgia, etc., the orthoform has no effect. In ulcer it is said to relieve pain. Gastralgia in chlorotic women is very difficult at times

to diagnose from gastric ulcer. Perhaps the age of the patient may assist slightly in a few cases. Gastric ulcer occurs much more frequently in women under 30 years of age; in men it occurs after 30; various ratios have been set up by different writers.

It is usually not difficult to differentiate gastric ulcer from attacks of gall-stones. In the case of gall-stones we have no specially localised pain, nor any special time of its appearance in relation to a meal; and we have frequently jaundice and a different clinical picture altogether from gastric ulcer, but sometimes the ulcer and the gall-stones may have abnormal symptoms. Both may be latent, and the gastric ulcer may be indicated only by profuse hæmorrhage, and the gall-stone by its discovery in the fæces after an acute attack of pain. Intercostal neuralgia crops up at times, but in this condition the pain is confined to the course of a particular intercostal nerve. I recently saw a case of locomotor ataxia in which the gastric crises were extremely highly developed. At first I was disposed to look upon it as one of gastric ulcer; but the pain was more constant, lasting continuously from two to three days and possessing no relation to the digestion of meals, nor to any precise spot in the epigastrium. From duodenal ulcer one is rarely disposed to diagnose gastric ulcer. I think it is hardly defensible in treatment to use the stomach tube, although sometimes it is serviceable.

TREATMENT.

To Cruveilhier we owe the initiation of rational treatment in gastric ulcer. He prescribed physiological rest for the stomach, a small amount of medication, and a modified dietary. Beyond these three points the profession has not as yet got; rest and dietary are the two essentials. I question whether there is much good to be obtained from the administration of drugs. Where hæmatemesis occurs it is absolutely necessary to starve the patient for two or three days. Whether during these two or three days a rectal enema should be administered, depends upon the individual condition of the patient and upon facts relating to the previous history. Perhaps in some cases it is advisable to administer enemata of milk, the peptonisation and preparation of which should be done under the personal inspection of the physician himself. I have spoken previously of the value of dried milk in various forms of gastric disease, and I have now to state that it forms one of the most important food stuffs that can be used in the second and third weeks of the treatment of gastric ulcer. Such a case usually requires to lie up for five or six weeks. Variation in the diet is of considerable import, and the mental effect of adding new materials to the diet daily conduces to a continuous and rapid recovery. It must be remembered that cow's milk forms a dense clot in the stomach, and this is the great argument against its use in gastric ulcer. Dried milk produces no such clot, but a granular precipitate. It is well in these cases to study thoroughly infant dietaries, because, for four or five months, the patient has to live upon such. One should never forget that peptic ulcers are prone to recur either on the old sites of the healed ulcers or in new areas.

POINTS IN TREATMENT.

THE TENDENCY TO HÆMORRHAGE IN JAUNDICE AND ALLIED CONDITIONS.

Prophylactic Administration of Calcium Chloride.

It is well known that a patient who is jaundiced has a greater tendency to bleed than has a healthy person. This is of importance both from a medical and from a surgical point of view. The following is a case which brings this home to one:—

A lady of 45 years of age had been suffering from attacks of severe colicky pain in the region of the gall-bladder for some months; for eight weeks past there had been increasing jaundice; a fairly definite lump was felt beneath the tip of the right ninth rib, but the patient was too stout to allow of detailed palpation. She had lost flesh slightly, but not more than could be accounted for by the anxiety, pain, and loss of sleep and appetite. In short, it was clear that the condition was due either to gall-stones and inflammation, or to gall-stones plus growth. It was decided that an exploratory operation was advisable, and laparotomy was therefore performed. Only a small incision was made; extensive and inoperable malignant growth of the gall-bladder was found; nothing further was done, and the wound was sutured. Shortly after returning to bed the patient became collapsed and blanched; she lived a few hours longer, but died with all the symptoms of an extensive hæmorrhage. There was no oozing from the wound, nor any bleeding into the peritoneal cavity. At the autopsy there was over 20 feet of solid blood-clot entirely filling the small intestine. The autopsy revealed no bleeding-point, nor any ulcer of the stomach, duodenum, or bowel. The appearances suggested that there had been a general oozing from the mucosa of the intestine, attributable to the hæmorrhagic tendency produced by the cholæmia.

HÆMORRHAGE IN JAUNDICE.

It is true that it is by no means in every case of jaundice that bleeding occurs so readily and to such a fatal extent. It is, however, difficult to pick out those cases in which hæmorrhage is going to occur from those in which there is little likelihood of it. Therefore operations in cases of jaundice should only be advised after the most careful and mature deliberation. The hæmorrhage described above was the result of very slight manipulation. Similar hæmorrhage from slight causes may readily occur without either anæsthetic or operation. Epistaxis, for example, is not at all uncommon, and it may be very severe. Hæmorrhage from the colon is also well known. Subcutaneous ecchymoses may result from comparatively gentle palpation. In a severe case of jaundice due to cirrhosis of the liver, after palpating the abdomen in the usual way in the endeavour to feel the liver and the spleen, it is not at all uncommon to find bruise-like marks appearing within a few hours at the sites of manipulation. These bruises may remain for a week or more and it is easy to see that in a medico-legal case they might be regarded as evidence of undue vigour, or even

violence, in the treatment of the patient. Similar bruises may occur anywhere in such cases; the nurse or attendant, in merely lifting the patient in the ordinary way, may cause extensive ecchymoses and bruising of the arms and body.

THE MEDICO-LEGAL ASPECT.

Nor is it only when jaundice is actually present that this bruising readily occurs; it takes place in various hepatic affections even when the jaundice is quite slight. The importance of this may be very great from a medico-legal point of view. A patient suffering from cirrhosis of the liver may develop delirium tremens: friends or relatives may cause extensive bruising by a perfectly moderate restraint, and if death ensues suspicions of foul play may arise. Quite recently a case of this kind very nearly ended in a husband being sent to gaol; he would have been had not the doctor been exceedingly good at giving his evidence. In the end it was clearly proved that the man had been most forbearing and patient, driven almost to his wits' ends to know how to cure his wife, and never using any violence even when most provoked.

SOME PRACTICAL POINTS.

We have dealt so far with hæmorrhages which have been, so to speak, spontaneous; that is to say, without actual gross severance of vessels. The condition is equally important in connection with bleeding from cut or broken surfaces. A tooth extraction, for example, may be followed by bleeding almost as difficult to stop as is that of hæmophilia. Incisions made by the surgeon need even more careful attention than usual, the minutest bleeding-points being closed to prevent subsequent oozing; in the case of actual vessels it is safer not to rely on torsion with forceps only, but to apply catgut or other ligatures.

HOW IS THE BLEEDING CAUSED?

The question arises: How do jaundice and liver affections lead to this tendency to hæmorrhage? In the first place, neither the bile pigments nor the bile salts are the cause of the trouble; at least, both bile pigments and bile salts may be experimentally mixed with the circulating blood in large proportions without there being any immediate tendency to hæmorrhage. This is important, because it confirms the clinical experience that jaundice may be intense, without corresponding bleeding propensities: for example, in cases of simple catarrhal jaundice. Moreover, in some cases the tendency to bleed may be very great though the jaundice may be but slight. It seems that jaundice is more liable to lead to hæmorrhage when it has been long existent. The physician will consequently be loth to recom-

mend any operation when his patient has been long jaundiced, and will advise treatment by calcium, described below, for some days before the operation is undertaken.

Secondly, there seems to be some alteration in the walls of the smaller vessels and capillaries; otherwise it is difficult to understand how general oozing into the intestine can come about, or subcutaneous ecchymosis from quite gentle palpation. We know of no medicines that will make the vessels strong again so long as the jaundice lasts.

A THIRD VIEW.

In the third place, there seems to be a change in the blood itself; experiments have shown that this is mainly one of deficient coagulative power. The coagulation time of the blood in many cases of severe and profound jaundice is very much prolonged. It has been found that this depends

in no way upon deficiency in fibrinogen, for as much of this is present as in normal blood; the fault lies with the fibrin ferment (thrombokinas), which is formed very slowly in these patients. This is a very important idea, because it at once suggests a possible means of relieving this part of the danger. The influence of small quantities of calcium salts upon the rapidity of formation of fibrin ferment is well known; it is wise, therefore, to administer calcium to these patients in some soluble form. Calcium chloride may be given in 10-grain doses three times a day. It is true that hæmorrhage may still occur, notwithstanding the administration of calcium; but this line of treatment has certainly seemed to minimise the danger in many cases. It ought to be given, if possible, for several days or a week before the performance of a dental extraction or a surgical operation in such patients.

THE METHOD OF DISPENSING CALCIUM CHLORIDE.

CALCIUM CHLORIDE is a medicine which is finding more and more favour with the profession. In suitable doses it is known to increase the force of the heart beat, to increase the coagulability of the blood, and to augment the healing powers of the tissues. It is therefore largely used as a prophylactic against heart failure in febrile conditions such as lobar pneumonia and typhoid fever; as a curative agent in hæmophilia, scurvy, purpura, and in many conditions in which spontaneous bleedings are liable to occur; and in such affections as indolent ulcers, chilblains, and other troubles dependent upon a sluggish circulation. There is every likelihood that it will be prescribed for so many different lesions that some of them will not be benefited by it; and presently it will fall into disrepute, notwithstanding its undoubted value when properly used.

THE PRESCRIPTION.

There is, however, another important reason why its prescription is liable to meet with disfavour—on the part of the patient—and that is its vile taste. It is not only salt, but also to some degree bitter, and, moreover, nauseous. The same applies to calcium iodide, or to a mixture of calcium chloride and potassium iodide. When it is desired to use the

last two together the greatest care must be taken in composing the prescription. Liquid extract of liquorice is a common aid in covering the taste of nauseous drugs, but it produces a hopeless yellow soup when mixed with calcium chloride and potassium iodide. It will be found that the following mixture, though not absolutely pleasant, can be taken without nausea:—

| | | | | |
|----------------------|-----|-----|-----|---------|
| R. Calcii chloridi | ... | ... | ... | gr. xv. |
| Potassii iodidi | ... | ... | ... | gr. v. |
| Syrupus limonis | ... | ... | ... | ℥iv. |
| Aquam chloroformi ad | ... | ... | ... | 3j. |
| Misce fiat haustus. | | | | |

Sig. Two tablespoonfuls of the medicine to be diluted with an equal quantity of effervescent water, such as soda water, and taken as often as directed.

It will be found that at least 4 drachms of lemon syrup are needed in each dose to cover the salt taste of the halogens, and that the medicine is then a little too sweet unless it is diluted with the soda water. The chloride of calcium is deliquescent, so that it cannot be kept as a powder except in sealed bottles or tins; for the same reason it cannot be dispensed in cachets. Capsules can be employed by druggists, but they are not conveniently made by a doctor practising in the country.

NEW APPLIANCES AND THINGS MEDICAL.

[We shall be glad to receive at our Office, 28 & 29 Southampton Street, Strand, London, W.C., from the manufacturers, specimens of all new preparations and appliances which may be brought out from time to time.]

PEPSALIA.

(CEREBOS, LIMITED, NEWCASTLE-ON-TYNE, AND 3 MAIDEN LANE, LONDON, E.C.)

PEPSALIA consists of a white powder which contains common salt, imparting to it a distinct saline taste; and also pepsine, the proteolytic ferment of the gastric juice in a dry state. The pepsine is associated with an acid. Thus in the preparation before us we have, to all intents and purposes, a means of not only satisfying our taste for saltiness, but also reinforcing our digestive power. That there are many cases of so-called atonic dyspepsia which are relieved by the administration of pepsine is an undoubted clinical fact, and we regard pepsalia as a most convenient form in which to prescribe pepsine, as it can be used as an ordinary table salt.

LYXHAYR.

(LYXHAYR, LIMITED, GROVE MILLS, MITCHAM, SURREY.)

THIS is a vegetable fibre, which the manufacturers claim is the cleanest and healthiest material for bedding and stuffing purposes, as it is odourless, and has been sterilised, and so rendered perfectly hygienic. It appears to be a good substitute for hair, and presents special advantages which make it popular for hospital use. With the object of testing it thoroughly and arriving at a practical conclusion as to the merits of this article, we have made arrangements to keep a Lyxhayr mattress under observation while used in a hospital ward, and so soon as it has been long enough in use to justify a definite opinion we shall publish a full report of the experiment and its results.

POINTS IN SURGERY.

TRAUMATIC SYNOVITIS OF THE KNEE.

I. DIAGNOSIS.

In this article it is proposed to deal with the ordinary type of case in which a pure traumatic synovitis follows an injury to the knee-joint. For clearness and brevity, the very severe injuries associated with fracture of bone or extensive laceration of ligaments will be excluded, and the various forms of infective arthritis, in the production of which trauma sometimes plays a part, will be mentioned no more than incidentally.

At the first thought there may appear to be but little scope for discussion with regard to the diagnosis of traumatic synovitis. The subject appears so simple. Yet this apparent simplicity is continually producing a rich crop of errors. As a matter of fact, much care and deliberation are required, for there are numerous pitfalls for the rash and unwary diagnostician. Thus, to take an imaginary case, a patient seeks medical advice because he has a swollen and painful knee, and he attributes the condition to an injury received a week previously in getting out of a dogcart. He has obvious synovitis; he has had an injury; therefore, argues the incautious one, he has traumatic synovitis. So the patient is advised and treated accordingly. A week later he complains of pain and swelling in one of the testicles, and it becomes clear that he has gonorrhœal epididymitis, and this is followed by the revelation that trauma, if it played any part at all in the inflammation of his knee, was quite subsidiary to gonorrhœal infection. Examination of the urine in such a case would almost certainly reveal the white shreds of gonorrhœa, and so lead to a correct interpretation of the joint affection. The writer has himself seen osteo-arthritis, tuberculosis, syphilis, gonorrhœa, and rheumatism of the knee, each buried away—for a time—beneath a diagnosis of traumatic synovitis.

As to the lesion which is present in any particular case of traumatic arthritis, it is not possible to do more than make a good guess. There may be laceration of a semilunar cartilage, especially the inner one, or a synovial fringe may have been pinched between the femur and tibia, or some other damage may have been done. However, apart from this doubt about the actual lesion, the cases form a group sufficiently homogeneous for collective consideration.

EXAMINATION OF THE PATIENT.

The clinical investigation must be systematic and thorough. Mere examination of the injured joint is not sufficient; a complete survey of the case is essential. As to the history, there ought to be a perfectly clear and definite account of a sudden painful injury to a knee in which nothing abnormal had been felt up to the moment of the accident, the injury being followed within a few hours by swelling of the

joint. If the history of trauma is indistinct, if the patient thinks he hurt his knee, but is not quite certain about it, or if the swelling of the joint did not appear until a week or so after the supposed cause, suspicion should arise that the case may be one of infective arthritis, in the causation of which trauma may or may not have played a part. Locking of the knee—that is to say, inability to extend the leg immediately after the accident—is good evidence that a semilunar cartilage has been damaged. The patient's account of the local affection having been elicited, he should be asked if he has had previous trouble with his knee, if other joints are or have been affected, and also if he is in good health and free from any constitutional trouble. If his replies are satisfactory and confirmed by the usual general examination, attention may be directed to the injured part. For this purpose both lower limbs should be made bare, so that fair comparisons can be drawn. On looking at the affected joint one expects to find it in a position of slight flexion and distended with fluid. Palpation reveals a moderate increase of surface temperature, as compared with the sound side, and there is some tenderness; but there should be little if any wasting of the muscles of the injured side. In the absence of an obvious hæmatoma, pitting on pressure is suggestive of either fracture or infection; and if the skin be dusky or reddened one may suspect that something more than simple traumatic synovitis is present.

On handling the joint in such a manner as to obtain fluctuation, the capsule of the joint is felt to be normally thin and flexible, so that the sensation of fluctuation is easily obtained and the fluid seems close beneath the fingers. But in some infective conditions, especially in gonorrhœal and pneumococcal arthritis, there is sometimes much peri-articular effusion, which renders the capsule hard and stiff, and so obscures the fluctuation of fluid within. And in syphilitic and tuberculous synovitis the synovial membrane may be swollen and "pulpy," and this, too, obscures fluctuation.

When the knee-joint is distended with fluid the patella is pushed away from the femur, with which normally it is in contact. If the effusion be of the kind which is poured out in response to trauma, the patella ought to be freely movable from side to side, and, when pressed backwards, the contact between the patella and femur should be felt as a clear, unmuffled tap. In the presence of peri-articular effusion the patella cannot be so freely moved from side to side, and if there be pulpy swelling of the synovial membrane, the tap of the patella against the femur will be muffled. In advanced cases of infection the patella may be fixed to the femur by organising granulation tissue, but such advanced instances of infective arthritis are hardly liable to be confused with traumatic cases.

Though tedious and difficult to describe, these manipulative examinations of the joint are quickly and easily performed, and are capable of conveying important information.

There is one more point. Pressure over the internal semilunar cartilage is usually painful, and this has been supposed to indicate injury to the cartilage. It has no such meaning, for tenderness at this point is present in most cases of arthritis.

Only to the dull or inexperienced will all the above suspicions and precautions appear excessive. A few days ago the writer saw a case which had at first been diagnosed as traumatic synovitis of the knee turn out to be an acute suppurative arthritis;

and in another recent case a knee-joint was operated on for the removal of a damaged semilunar cartilage, whereas tuberculous arthritis was discovered. In the latter case there was no doubt whatever about the history of sudden severe trauma; and in the former also, though the history was not so definite, the trouble was believed to have originated in a sprain. These and numerous other cases demonstrate that without the utmost care and persevering caution mistakes in diagnosis can hardly be avoided.

PRACTICAL NOTES ON DIAGNOSIS AND TREATMENT.

Gall-stones and Cancer.

It is said that in seven-eighths of the cases of primary cancer of the gall-bladder gall-stones have been present, and it is suggested that the malignant process is due to the irritation set up by the calculi.

Sodium Benzoate in Pharyngitis, etc.

SODIUM benzoate is of distinct value in the treatment of inflammatory conditions of the upper air-passages—pharyngitis, laryngitis, bronchitis, etc. It may be given in daily doses of 75 grains for a child, 150 grains for an adult.

Tea in Gout.

I AM a great believer in the value of tea as a preventive of gout, and as aiding in the elimination of uric acid. It should be taken weak and quite freshly made. I also always insist on the avoidance of sweet fruits and on the free use of green vegetables.—*Mr. Jonathan Hutchinson.*

Gastric Ulcer.

DR. GEORGE PARKER has found calcium chloride of service in cases of gastric ulcer. He quotes two clinical records in which the usual forms of treatment, as by bismuth, peptonised milk, etc., had had very little success, whilst the administration of calcium chloride was followed by prompt relief.

Optic Atrophy in Disseminated Sclerosis.

In insular sclerosis optic atrophy is by no means uncommon, but it differs in several respects from that met with in locomotor ataxy. It is less regular and progressive, is often unilateral (at all events for a very long time), and if bilateral, is marked by decided want of symmetry.—*Mr. Lawford.*

Diarrhoea in Infants.

THE following are useful formulæ to check diarrhoea in infants and young children: (1) Carbolic acid, grs. ij.; bismuth subnitrate, 5j.; syrup, 3ss.; water to 3ij.: a half teaspoonful every two to four hours. (2) Zinc oxide, grs. j.-ij.; paregoric, m. j.-ij.; syrup, m. xv.; water to 3j.: a dose to be given every two or three hours. Thin arrowroot with a few drops of brandy will also help to check diarrhoea.

Quinine in Pertussis.

THE proper dose of quinine in whooping-cough is $\frac{1}{2}$ grain for each month of a child's age and $1\frac{1}{2}$ grains for each year, given three times in the day—at 6 A.M. and 2 and 10 P.M. More than 6 grains thrice daily is not necessary even for the older children. The remedy should be continued for three weeks and the dose be gradually decreased as the symptoms subside.

Latent Tuberculosis.

A SAYING of Trousseau was, "If you have a case of anæmia which resists treatment by iron, always suspect tubercle or syphilis."

Chloral Hydrate.

THE taste of this remedy can be masked by ordering the syrup to be taken in half a tumblerful or so of effervescing lemonade.

Ulcers of the Leg.

DR. A. G. PATER confirms Dr. Stephens' recommendation in favour of the administration of calcium iodide in cases of ulcer of the leg. Even instances which had resisted all kinds of treatment for years showed in a week or two clean granulating surfaces, and the induration around the ulcers soon disappeared; in almost all cases complete healing was secured. The dose given was 2 grains thrice daily in a mixture.

Alkalies in Hyperacidity.

To relieve the pain of hyperacidity I prefer to order bicarbonate of sodium in doses of 30 to 60 grains dissolved in two ounces of water. The patient is directed to take the first dose two hours after each of the principal meals and to continue every hour until four doses have been taken. Under this treatment the pain after food rapidly diminishes, and finally subsides, pyrosis disappears, and the bowels are moved freely.—*Dr. Soltan Fenwick.*

Thread Worms.

FOR the treatment of thread worms in adults, a condition often very resistant to the ordinary remedies, Dr. A. Newton-Davies advises the following: Two ounces of compound decoction of aloes before breakfast, a diet rich in proteid but of meagre quantity, and a pill (keratin coated) of 2 grains of extract of quassia at bedtime. On the second day a pill is to be given thrice daily, and this is to be continued for a few days, the decoction being repeated when necessary.

Brachial Neuralgia and Neuritis.

IN these cases it is necessary to enjoin complete and absolute rest (by means of a sling or by bandaging the arm to the side) for the affected limb. The second great factor in treatment is counter-irritation, beginning with mustard leaves and, if necessary, passing on to the thermo-cautery. The counter-irritant should be applied over tender points. Of internal remedies, I have obtained the most satisfactory results with a combination of sodium salicylate with potassium iodide and bromide.—*Dr. Aldren Turner.*

THE GENERAL PRACTITIONERS' COLUMN.

[Contributions to this Column are invited, and if accepted will be paid for.]

POINTS IN PRESCRIBING.

By D. M. MACDONALD, M.D., Dunkeld.

THERE is a growing danger that prescription writing will become a lost art. The causes need not be discussed at length, but two of the leading ones may with profit be indicated. One is the advance and increase of the products of pharmacy in a portable and palatable form. Instead of committing posological tables to memory, the practitioner has only to remember a number, or, failing that, a name such as Pil. Blaud Co. (Smith and Co.). This is a matter for regret. The mere fact of having the doses of at least the more potent drugs at one's finger-ends is in itself good mental exercise, and if the effort has not to be made, the acquired function soon ceases to exist, while the composition of pill and mixture calls for a knowledge of the action of one drug upon another, and of both upon the body. It is surprising how few medical men there are who originate a prescription of their own, and do not borrow or copy formulæ.

THE TEACHING OF PHARMACY NEGLECTED.

Another contributing cause is the scanty treatment of practical pharmacy at schools of medicine. Owing to the "hypertrophy of anatomy," a subject of much greater use to the student is almost crowded out of his curriculum. In olden days some of our foremost practitioners spent a portion of their time with a good pharmacist, getting practical knowledge of making up preparations and prescriptions, and so laying the foundation of confident and accurate prescribing in after-life.

SOME COMMON MISTAKES IN PRESCRIBING.

It is the purpose of this article to mention some common mistakes which should not be made by any practitioner with a sound knowledge of his work. In the first instance, the prescriber should be precise. How frequently one meets with the following in a prescription:—Aq. menth., liq. morph., hydrarg chlor., bismuth, wherein the intention of the doctor has to be interpreted by the chemist, who may never have seen or heard of the writer of the prescription. It might be argued that liq. morph. always means liq. morphinæ hydroch.; still, in combination with liq. plumbi subacet., for example, precipitation results if the hydrochlorate solution is used.

There are two official solutions of arsenic, an alkaline—Fowler's—and an acid, to suit convenience in prescribing. Fowler's solution is not infrequently prescribed with liq. hydrarg. perchlor. If the pharmacist does not interfere and give the acid solution, the patient may get all the precipitated mercury in the last dose. A similar fate awaits the strychnine if liq. strych. and liq. arsenicalis are given together. The rule, of course, is obvious—namely, to order the acid preparation when the alkaline one induces chemical change. Before leaving strychnine solution one may remark that frequently in heart lesions

it is combined with iodide of potassium. This is a mistake, as the alkaloid is in danger of precipitation by iodides.

Iodides, as is well known, set up in some patients all the symptoms of a cold in the head, even in small doses. Changes in the mouth, such as enlargement of the tongue, dribbling of saliva, etc., are occasional unpleasant symptoms. Difficulties in this way may frequently be overcome by giving small doses of arsenic simultaneously.

These salts are in the majority of cases best given alone. A few samples will indicate why.

| | | | | | |
|---------------------|-----|-----|-----|-----|------|
| R. Potass. iodidi | ... | ... | ... | ... | 3i. |
| Spt. ether. nitrosi | ... | ... | ... | ... | 3iv. |
| Syr. aurantii | ... | ... | ... | ... | 3iv. |
| Aq. ad | ... | ... | ... | ... | 3vj. |
| Ft. mist. | | | | | |

Unless the chemist interferes, and alkalis the normal acid spt. ether. nit., iodine is liberated and the mixture becomes an impossibility.

Again, take the following:—

| | | | | | |
|----------------------|-----|-----|-----|-----|------|
| R. Syr. ferri iodidi | ... | ... | ... | ... | 3iv. |
| Spt. ether. nitrosi | ... | ... | ... | ... | 3ij. |
| Glycerini | ... | ... | ... | ... | 3iv. |
| Aq. ad | ... | ... | ... | ... | 3iv. |

Here even the above artifice is of no avail, since if the spt. ether. nit. is made alkaline precipitation of the iron follows. The mixture is a hopeless one, and should never have been ordered.

It is equally reprehensible to associate iodides with tinct. ferri perchlor., as sometimes occurs, an almost dangerous combination resulting. Iodides are frequently administered with quinine, and if the latter salt be a neutral one it is quite all right. The following prescription is a mistake:—

| | | | | | |
|--------------------|-----|-----|-----|-----|------------|
| R. Quin. sulph. | ... | ... | ... | ... | grs. xxiv. |
| Acid. nitric. dil. | ... | ... | ... | ... | 3j. |
| Potass. iodidi | ... | ... | ... | ... | 3ij. |
| Aq. ad | ... | ... | ... | ... | 3vj. |
| Ft. mist. | | | | | |

The nitric acid liberates the iodine, which in turn precipitates the quinine. If the dispenser reduces the nitric acid to a few minims, a clear mixture will result.

Consider, too, this favourite formula:—

| | | | | | |
|---------------------|-----|-----|-----|-----|--------|
| R. Bismuth. subnit. | ... | ... | ... | ... | 3iij. |
| Sodii bicarb. | ... | ... | ... | ... | 3iij. |
| Glycerini | ... | ... | ... | ... | 3vj. |
| Aq. ad | ... | ... | ... | ... | 3viij. |
| M. ft. mist. | | | | | |

Some pharmacists dispense this by adding boiling water to the two powders, when carbon dioxide is evolved immediately and completely. If dispensed with cold water there is danger of an explosion occurring from the gas being confined in the bottle. It would simplify matters if prescribers would write carbonate of bismuth instead of subnitrate.

There are instances, of course, when decomposition is not only intentional, but distinctly effi-

cacious. For example, the *mist. ferri co. B.P.* contemplates subsequent formation of ferrous carbonate, as also does the well-known Bland's pill.

A combination called *gargarisma chlorinæ*, which, properly prepared, is one of the most efficacious remedies we have in the treatment of a septic throat. The colour, unfortunately, varies with the dispenser, but if dispensed well it should be quite green. The composition is as follows:—

| | | | | |
|---------------------|-----|-----|-----|----------|
| R. Potass chloratis | ... | ... | ... | grs. xv. |
| Acid. hydroch. | ... | ... | ... | 5s. |
| Aq. ad | ... | ... | ... | 3vj. |
| Ft. gargarisma. | | | | |

The secret lies in using crystals of the salt, strong acid, and a dry bottle. After decomposition is complete the water is added in small quantities at a time.

Amongst the drugs in daily use salicylate of soda occupies a foremost place. This salt varies a good deal, both chemically and physiologically.

Take the following very common prescription:—

| | | | | |
|---|-----|-----|-----|-------|
| R. Sodii salicylatis | ... | ... | ... | 5ij. |
| Spt. amm. arom. | ... | ... | ... | 3iss. |
| Tinct. nucis vomicæ | ... | ... | ... | 3s. |
| Aq. ad | ... | ... | ... | 3vj. |
| M. ft. mist. $\frac{1}{2}$ part for a dose. | | | | |

This mixture is quite clear when first dispensed, but in a day or two becomes brown or even black,

due to oxidation changes in the salicylate by the ammonia. I have tried substituting potass. bicarb. in the place of the ammonium carbonate. The change occurring is much less marked, and takes a longer time. Here it is important for the medical man to know what is taking place, so as to be able to satisfy any inquiry on the part of the patient as to the cause of the change. One should also avoid combining salicylates with iron preparations. If alone, salicylate of iron, of a reddish colour, is produced; but this may give rise to varying hues depending on the other constituents of the mixture if the salicylate and iron are associated with an infusion, etc.

Salicylates should not be combined with mineral acids, or salicylic acid is precipitated. They are also incompatible with caffeine, with which they are frequently given. For example:—

| | | | | |
|----------------------|-----|-----|-----|------|
| R. Sodii salicylatis | ... | ... | ... | 5ij. |
| Caffein citratis | ... | ... | ... | 3j. |
| Aq. cinnam. ad | ... | ... | ... | 3vj. |

Here a dense precipitate forms on the top of the mixture. The prescriber may escape the difficulty by adding a little spt. ammon. arom. or by giving the combination in cachet instead of mixture form. It has been pointed out lately that the epistaxis so frequent in influenza is due to administration of salicylate of soda. It would be interesting to know if this occurs with the physiologically pure drug.

RESIDENT MEDICAL OFFICERS' DEPARTMENT.

(Contributions to this Column are invited, and, if accepted, will be paid for.)

DELAY IN ATTENTION TO CASUALTIES.

HOSPITAL patients now and then complain that they are kept waiting for long periods of time before they receive attention from the medical officer on duty. Sometimes these complaints reach the ears of the hospital authorities, and the house physician or house surgeon is in consequence haled before the Board. Being unable, perhaps, to recall the exact details of circumstances of a week ago, he has no definite excuse to offer, and is accordingly censured—more often than not quite unjustly.

The medical officer on duty in most hospitals is expressly ordered to attend to all casualty cases without delay, and to consider this paramount to any other work upon which he may be engaged at the time. In theory this is only right; but in practice it is not always feasible, as anyone who has worked in hospital knows perfectly well. There are many duties which cannot justifiably be left half-finished, except to attend to cases of extreme urgency. The house surgeon on duty has all his ordinary work to do, and, were he to obey every summons from the casualty department the instant he received it, and without regard to whatever else he might be occupied with at the moment, the condition of his wards and his patients and of the nursing staff would become intolerable—a chaos of worry and flurry, of half-finished dressings, of half-given orders, and of examinations and minor operations interrupted at critical moments.

If it is really essential that all casualty patients

should be seen immediately on arrival, then the resident staff of every hospital must be so increased in number that one medical officer may always be on duty, with nothing else to do, and with proper accommodation for kicking his heels when business is slack. There is no other way of making absolutely certain that each patient is seen without delay, irrespective of whether his complaint is trivial or urgent.

As a matter of fact the present system on the whole works admirably, and it is the rarest thing for any case of the least urgency to be kept waiting long enough to cause harm. Hospital porters are generally very shrewd fellows, and they seldom fail to secure the prompt attention of the house surgeon to an urgent case; and when they are in doubt they are far more likely to over-colour the gravity of the patient's appearance than to make too light of it.

The patients who pester kind-hearted clergymen and hospital subscribers until the latter lodge complaints of delay with the governors are very often not the necessitous poor, but members of that class of parasites who can afford to pay for medical advice, to whom we devoted an article in a previous issue. Those who abuse hospitals in one sense are nearly always the first to abuse them in another. The genuinely poor are, in the writer's experience, much more patient, considerate and grateful than are those who seek free treatment to which they are not entitled.

THE TREATMENT OF INSANITY.

Existing Defects and their Remedy.

VII. HOW TO TRY TO FIND A CURE.

THIS is the question. Is it not worth while to attempt the cure of diseases that are not only dreadful to the individual, but also a heavy burden on the community? More than 1,300 cases of general paralysis occur in England and Wales every year. Supposing each case has a duration of three years, the discovery of a remedy for general paralysis would mean the abolition of two asylums of the largest size. The number of cases of acute insanity is not recorded in the official statistics, but it is certainly not less than the number of cases of general paralysis. If a remedy could be found for only half of them, it would relieve the rates to a similar extent. The suggestion that these diseases may be curable is not chimerical. It is not a proposal to square the circle or to discover perpetual motion. It is much more hopeful than the search for a cure for cancer; for of the origin and nature of cancer we are still almost wholly ignorant, but we know beyond dispute that insanity can be produced by poison; and that many cases of acute insanity and all cases of general paralysis are produced by poison is a certainty. Many cases can, and do, recover, and of the cases that do not recover a large proportion are of the same nature and character as those that do. They remain trembling for a certain time in the balance between recovery and death, or between recovery and permanence of the insanity, and it needs but a small matter to turn the balance in one direction or the other. Even of general paralysis some cases recover. If, therefore, it is justifiable to found an institute, and to conduct at great cost experiments for the cure of cancer, *a fortiori* is it justifiable to do the same for these cases of insanity.

This, then, is the position. Here is a disease more dreadful than cancer; a disease not only more dire in its effects on the individual, not only imposing a much heavier burden on the community, but one that menaces even more than cancer unborn generations. Yet, while cancer has occupied, and does occupy, the most strenuous labours of an army of workers, for insanity little is being done. This state of things is a reproach to medical science. It shouts and clamours for a remedy. For reasons that have been given it is not feasible to look to existing institutions for what is required. What is wanted, and what must be provided, is a hospital, in the proper sense of the term, for mental disorders. It should have wards for in-patients, and a department for out-patients. It should be fitted with the peculiarities of a lunatic asylum and with

the appliances of a hospital. It should have its clinical and pathological laboratories, its resident staff and its visiting staff; its physicians and its surgeons. It should be a hospital in name and in deed for the active study and treatment of disease; not a residence for mentally affected persons until they get well or die. Its wards would be fed by its out-patient department, and its patients would be treated until they were restored to health, or until they were deemed irrecoverable and passed on to asylums. It would be a school, both undergraduate and post-graduate, in which physicians could be trained who would subsequently have charge of asylums, and from which a knowledge of mental disorders would be diffused throughout the medical profession. One great difficulty that besets the general hospital would be absent from such an institution; and another that besets the registered hospital would have to be carefully excluded. There would be no difficulty about competition with the general practitioner. The general practitioner does not treat cases of mental disorder, and is glad to get them off his hands. But if the patients were permitted to pay for their accommodation there would be the same temptation that there is in registered hospitals to receive first, and retain longest, those who paid the most. For this reason the hospital should be independent of any payments on behalf of patients.

This, then, is the scheme that we advocate, and for this scheme money ought to be, and must be found. It is not at all necessary that a large sum should be found at first. There are ways in which a thoroughly efficient beginning might be made on a scale small enough to be inexpensive, but large enough to be thoroughly trustworthy. So far as we know, there is nothing in the constitution of, for instance, St. Luke's Hospital which would prevent the addition of the necessary equipment and the necessary staff. Or a beginning could be made by setting aside a ward in one of the existing general hospitals for the trial of the experiment. Already there are out-patient departments for mental diseases at St. Thomas's and at Charing Cross Hospitals, which are doing excellent work. The devotion of a ward to the same purpose would need but a small outlay of money, and more wards could be incorporated in the scheme as its success became assured. At the present moment four of the wards in Charing Cross Hospital are closed for lack of funds. One of these could be remodelled for mental cases and maintained for a year for 20 patients at a cost of about £1,500. We have no authority for saying that such a scheme would be welcomed by the authorities of either of the institutions that have been mentioned. The concrete instances have been given only to show how easily practicable it is to form the commencement of such a plan as we have outlined. If it were found fertile it would form a very strong ground for an appeal to the charitable public for funds for a more ambitious scheme.

THE BOOK WORLD OF MEDICINE AND SCIENCE.

METABOLISM AND PRACTICAL MEDICINE. By many authors; edited by CARL VON NOORDEN, Professor of the First University Medical Clinic, Vienna; English issue under the editorship of I. WALKER HALL, Professor of Pathology, University College, Bristol; Pathologist to the Bristol Infirmary. (London: William Heinemann. Small 4to. 3 volumes, together price £2 12s. 6d. net. Vol. I., pp. 452. Vol. II., pp. 525. Vol. III., to be issued shortly.)

We congratulate Professor I. Walker Hall upon his English edition of Professor Carl von Noorden's well-known text-book. He has obtained the services of excellent translators, and although so monumental a work upon so complex a subject can scarcely be described as easy reading, the subjects dealt with have almost without exception been made as clear as possible by expressing the sense rather than the wording of the German. This is always a most important matter in making an English edition of a German work, and we think that Professor Walker Hall and his collaborators have succeeded excellently. The long German sentences have been broken up, and the compound adjectives have been divided and rearranged in a way that has required much skill. Difficult though the subject matter is to those not already familiar with it, we are sure that this is not the fault of the English in the edition which is before us.

We are rather sorry that Professor von Noorden tends to be polemic in the chapters he himself has written; but upon the whole the writing is level-headed. If there is one fault in the German edition it is that Continental papers are fully given, whilst those of English and American authors are largely overlooked; this fault has been greatly improved by Professor Walker Hall in his English edition. The book should be in every medical reference library and in every chemico-pathological library; it is indispensable to those engaged in research. We think that every consulting physician should have a copy, to which he will be constantly referring; but those who have been in practice for some time will probably feel that it is too great a labour to try and become familiar with all this recent work. It would be very difficult to boil down the contents of these three volumes into one small handbook, and meanwhile the books before us are quite the best for those who wish to gain an insight into metabolism in relation to practical medicine.

Volume I. deals with the physiology of metabolism; that is to say, with our knowledge of the metabolic processes of healthy persons. It is translated from the German of Adolf Magnus-Levy, of Berlin. The chapters upon the foodstuffs, digestion and absorption, the fate of the foodstuffs in the tissues, the total energy exchange, the respiratory quotient, nitrogenous metabolism in general, and so on, are perhaps chiefly of interest to the physiologist, from whom the physician is content to learn the kernel of each question discussed; there are, however, other chapters which are of essential interest to the physician, to the gynaecologist, and possibly to the surgeon—namely, those upon the influence of climatic and other conditions upon the minimal metabolism, and of menstruation, pregnancy, and castration; the rôle of water in metabolism; the metabolism of mineral substances, sodium chloride, phosphorus, calcium, magnesium, the halogens, the alkalis; and metabolism in old age.

Volume II., written by von Noorden, Kraus, Schmidt, Weintraud, Mathers, and Strauss, deals with the pathology of metabolism in hunger and chronic starvation; in over-feeding; in fever and infection; in stomach diseases; in

intestinal diseases; in diseases of the liver, respiration, circulation, blood, and kidneys.

Volume III. is not yet before us, but is to be a continuation of the pathology of metabolism, including diabetes mellitus, and general pathological conditions. We hope that, in addition to the general index of subjects, there will be an alphabetical index of all the authors referred to; there is none such in the first two volumes, and we miss it very much.

TICS AND THEIR TREATMENT. By HENRY MEIGE and E. FEINDEL, with a preface by Professor BRISSAND. Translated and edited by S. A. K. WILSON, M.A., M.B., B.Sc. (Published by Mr. Sidney Appleton, London. 8vo., pp. 386. No illustrations. Price 9s. net.)

THIS book is a masterpiece of its kind, dealing with tics of all sorts from every point of view. It is, however, a volume which we think will find its place in the libraries of hospitals, nerve specialists, and alienists, rather than in those of general practitioners. It is clearly written, full of details, well indexed and printed, and has a compilation of the literature upon the subject occupying 29 pages. It begins with a lucid account of a patient who not only suffered from a multitude of different tics, but had also the power of giving a graphic description of the origin, cause, and effects of each of them. It then proceeds to discuss at great length the definition of tics, distinguishing them clearly from spasms, tremors, simple habits good or bad, stereotyped acts, and so forth. The authors deprecate the term *tic douloureux*, which has led to much confusion, seeing that tics are all motor phenomena, and that *tic douloureux* is not a tic at all. They lay stress upon the facts that only predisposed persons suffer from tics; that tics are essentially cortical in origin; that they are multifarious in kind; that they must have no reflex origin, or else they are spasms and not tics; that they are related to mental derangements. The authors' arguments are all clearly expressed, and we agree with them in the main; they give many illustrative cases which add much interest. The description of the different varieties of tic—facial, auditory, nictitating, sniffing, sucking, licking, and biting tics, tics of the neck, trunk, arm, shoulder, legs, tics of writing, spitting, swallowing, vomiting, wind-sucking, snoring, sniffing, blowing, whistling, coughing, sobbing, and hiccupping, tics of speech—is excellent. Their differential diagnosis is discussed, and finally there are two chapters upon treatment; these are only 47 pages of the whole, but they are the chapters which will appeal most to the practitioner. The authors discuss every form of treatment that has been tried; they deprecate operative measures of all sorts, whether for spasmodic torticollis, or for any other tic, and have themselves observed the very greatest benefit from careful treatment by exercises, mirror drill, and re-education of the motor-centres, all of which are described in detail.

BOOKS RECEIVED.

W. H. AND L. COLLINGRIDGE.

"The City of London Directory," 1907.

BAILLIÈRE, TINDALL, AND COX.

"Pulmonary Consumption." Third edition. By A. Latham, M.D.

J. M. DENT AND CO.

"Sick Nursing." By H. Drinkwater, M.D. (Temple Primers.)

W. HEINEMANN.

"Metabolism and Practical Medicine." 2 vols. By Carl Von Noorden.

THE PRACTITIONER'S RELAXATIONS AND HOBBIES.

TRAVEL AND BIG GAME SHOOTING.

WHEN members of the other learned professions discuss the advantages and disadvantages of medicine as a career, they frequently dilate upon the facility with which a young medical man may "see the world" at little expense, or even on terms of actual remuneration. Nor is there any doubt that such chances do occur in our profession much more often than in others. There must be a great number of practitioners who have fulfilled the duties of a ship's surgeon for one or more voyages to distant shores. Pleasanter or healthier relaxation could not be desired than a long passage on a big liner, especially after the weary toil of examinations or the enervating fatigue of house office. Unlike the

more halcyon an existence than that of the yachtman aboard one of these palaces of luxury. The house party and their surgeon cruise from port to port or from island to island, and it is especially in the least frequented and least hackneyed places that they are most warmly welcomed by the inhabitants. There is no immutable route marked out, no strict time schedule to be observed, and the length of stay in any port is determined solely by the time required to exhaust its attractions. Moreover, a yacht generally visits a much larger number of places than her big sisters—the liners. Some yachtsmen seek opportunities for sport, and their surgeons have been known to try their luck at turtle turning, shark

catching, tarpon fishing, wild-fowling, and other exciting pursuits.

The foreign travels incidental to the medical services of the Navy and the Army are perhaps not strictly recreative, but part and parcel of duty; they are at least a serious inducement in the eyes of many of the candidates for admission. A few years ago the late Boer war provided for many young practitioners the well-paid and usually pleasant duties of civil surgeons, with the added attractions of



FIG. 1.—CAMP, RONGAI RIVER, BRITISH EAST AFRICA.

barrister or the public schoolmaster, the medical man, when once engaged in practice, is often confined for life to a village or small country town, with holidays so brief as to preclude any travel further than Cisalpine Europe. It is not strange that young and active men with such expectations should accept eagerly the chance of voyaging to some distant country before they finally bow their necks to the yoke. So attractive to some men are these appointments that the scanty pay and lack of prospects are not able to detach them from the sea; in the employ of every big line there are surgeons who have passed the best years of their lives at sea, and they are, as a rule, placed in charge of the largest and most modern ships.

More lucrative, and even more comfortable, are the posts on private ocean-going steam yachts, but they are, of course, distinctly rare. There is no

medals and glory. Arctic and Antarctic expeditions have before now offered chances of distinction to their medical officers, who have frequently been men of varied talents—artistic, geological, or biological, as well as medical. The medical charge of semi-invalid or convalescent patients are often better paid, and a continental tour of this kind may be extremely pleasant. In the Colonial medical services, particularly those in tropical Africa, the routine of professional work is often disturbed in many ways. Medical men have been known to act as commander-in-chief, judge, sheriff, executioner, tax collector, and what not, as well as P.M.O., in outposts of the empire where but one white official can be allotted to each station. They often find compensatory recreation in the most thrilling, because the most dangerous, sport in the world—big game shooting. But the surgeon, whose

chances of this are really unique, is he who travels with a private shooting party. With improved roads and the building of railways the need for a medical man is much reduced, and many parties now go without one; but the big game hunter can never be secure from the risks of serious injuries



FIG. 2.—GRANT'S GAZELLE.

and of tropical fevers, and prompt surgery may save a limb or a life necessarily sacrificed when help is hundreds of miles away.

ON THE EAST AFRICAN VELD.

In healthy countries, such as the highlands of East Africa, British Central Africa, and Abyssinia, life on "safari" is ideal. By dawn the camp is astir, and before sunrise the white man too is out of his blankets. While he attacks breakfast his boy packs the camp bed and other baggage, and the porters fold up his tent. The latter pick up their 60 lb. loads, their master and his gunbearer take the lead, and the procession winds in single file across spreading plains or over lofty mountains. Presently the laden porters are left behind, and coming cautiously to the brow of a slight rise the hunter sweeps the next fold from behind a bush. In front may be two or three large herds of one of the commoner species of antelope, but they are not wanted to-day; away to one side, perhaps, a crowd of lovely zebra, easy to stalk but difficult to kill. Then the sweep checks as something really worth chasing comes into the field of the glass; it may be a rhinoceros waddling about in his peculiarly aimless fashion, a herd of eland with a fine bull, a kudu, a waterbuck, or a sable antelope, say. Word is sent to the caravan to make a detour out of sight, and to pitch camp by a distant hill where the guide says there is a stream, and the stalk begins. Where or when it may end is on the knees of the gods; often the most cunning shikari is forced to abandon his stalk miles from his route perhaps to start a more successful one as he is making for the rendezvous. As he seeks this he must note the landmarks by which to direct the subsequent recovery of the prize, and keep a careful watch for the trail of his porters. A huge meal in camp

and a lounge in the tent pass the time until some 40 minutes before sunset, when a short excursion for game birds, and the off-chance of a prowling lion, concludes the labours of the day. A typical camp includes large square double-walled "explorer's" tents of the type shown in Fig. 1, of which one is carried for each sportsman, and a number of small thin canvas shelters wherein the porters sleep huddled together for warmth at night. The latter are recruited almost exclusively from Bantu tribes, chiefly Swahili, Nyamwezi, Ukamba, or Kikuyu. The three former tribes carry their loads upon their heads, but the latter prefer to sustain them somewhere in the small of the back by a broad strap passing round the forehead. In consequence, they must bend continually forwards, and their gait is highly ungainly compared with the upright bearing of the coast men; but nevertheless they make excellent porters. The Nilotic peoples are averse to any form of work, especially the most intelligent and bravest tribe, the Masai, who do nothing at all! The study of these interesting natives is not the least of the fascinations of Equatorial Africa, for often a march of a few miles brings the traveller to a region where language, customs, weapons, and even animals are entirely different from those he has just left. Thus Grant's gazelle, Fig. 2, is found in two distinct forms in the highlands, and in two more near the coast. The illustration of this beautiful antelope is of the northern highland variety. The subject of Fig. 3, the warthog, is of a somewhat different order of beauty; though not so game as his Indian cousin; the warthog is quite capable of turning to bay if he is cut off from his earth, and a big tusker is well worth sticking. Sometimes a stay of several



FIG. 3.—WARTHOG.

days in one camp is made, and night watches for the king of beasts, or weary tramps after elephant or buffalo, are undertaken; sometimes the camp is moved daily. In either case the pleasures and fatigues of the chase, the observation and perhaps photography of wild nature, the free life, and keen breezes of the highland plateaux combine to render such expeditions delightful.

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

THE UNITS OF GENERAL HOSPITAL CONSTRUCTION.

THE SURGICAL WARD UNIT.—(Continued.)

IN the construction of some operating theatres unnecessary expense has been incurred in attempting to thin the window-frames, in order to avoid shadows being cast on the table, and in consequence the frames are made of iron. Wood frames



FIG. 3.—AN AMBULANCE TROLLEY.

are equally suitable and much less costly, and where the building has a northern exposure there is no risk of shadow. The windows and doors should fit closely without projections or ledges, in order that no crevices may be left where dust can lodge. In some cases the doors are made of iron, but a hard wood door with a plain, polished surface, having no panels or mouldings, serves the same purpose. The furnishings should be of the simplest type, to prevent the least possibility of collecting dust, and if movable should be on ball-bearing castors.

OPERATING TABLES.

There is no end to the variety of operating tables, and their cost varies from £10 to £100. The simpler the table, the less there is to keep clean; an excellent table, meeting all the requirements of modern surgery, can be got for about £15. It is always an advantage to have the ambulance trolley of similar dimensions to the operating table. Fig. 3 shows such a trolley. By means of the lever action it is made a fixture resting on two legs, and can be used as a table in emergency, or the third wheel can be put into action and used as a trolley. Fig. 4 shows a simple but most useful stand for instrument trays: the one tray contains the sterilised instruments, and the other, instruments that have been used. Fig. 5 shows receiver for soiled dressings with a cover, avoiding the exposure of blood-stained dressings when they are being removed to the destructor. Fig. 6 shows an irrigator stand

on ball bearing castors; there is a lever with a check action at the side for raising the vessel three or four feet in height, and preventing the possibility of the vessel coming down suddenly and getting smashed.

Adjoining the operating theatre are the anæsthetic room and the robing room for surgeon and assistants on the one side; on the other are the sterilising and surgical dressings room. The doors to these are placed under the side galleries. None of those rooms open directly to the main corridor, and the risk of dust blowing into the theatre or its annexes is thus obviated. The students enter the galleries from stone stairs and have no direct communication with the area of the theatre. Those under the window enter through the galleries and are cut off from the operating area by a terrazzo wall three feet six inches in height.

THE LECTURE ROOM.

If the lecture room is fitted with benches and tables, it can be utilised as a general class room for microscopical demonstrations or other purposes. Arrangements should be made whereby the lecturer may give a lantern demonstration and show stereoscopic photographs. The room should therefore be fitted with dark blinds, in order that it may be readily darkened. These blinds should have a spring action, and be rolled up into boxes with close-



FIG. 4.—THE "MACKINTOSH" INSTRUMENT STAND.

fitting lids, so that when not in use they are free from dust. In addition, a heavy electric wire sufficient to carry 20 amperes of current must be led to the room, and a plug and switch fixed in a suitable position. A lantern screen should also be provided.

There remain the special units such as those for diseases of the ear, diseases of the throat, diseases of the skin, gynecology, burns, and septic cases unsuitable for the general wards. In all of those, with the exception of the gynecological, provision must be made for both male and female patients. The gynecological unit should always be as far removed as possible from the septic, and even the burn and skin wards. These units are simply modifications of those already described, and should not be inferior to them either as regards cubic capacity or constructive detail.

LIGHTING ARRANGEMENTS.

In the special units for the treatment of diseases of the ear, nose, and throat a room should be provided where patients can be examined by artificial light, arrangements being made whereby the room can be readily darkened. Some specialists prefer to have this room fitted up with electric light only. In this case provision must be made for the heating of the laryngoscopic mirrors, either by hot water or by an electric heater. Other specialists prefer to use gas; an ordinary argand burner is found quite serviceable, and serves the double purpose of illumination and also for heating the mirrors.

In the unit for the treatment of diseases of the skin a few special bath fittings must be arranged for. Besides two sitz baths, a hot-air bath should be supplied. This hot-air bath can be arranged in the form of a cabinet, heated by a number of incandescent electric lamps placed in front of reflectors. It has the advantage that it can be placed in an ordinary, well-ventilated room, so that while the patient is in the bath he is breathing fresh, pure air. Various forms of these electric baths have been

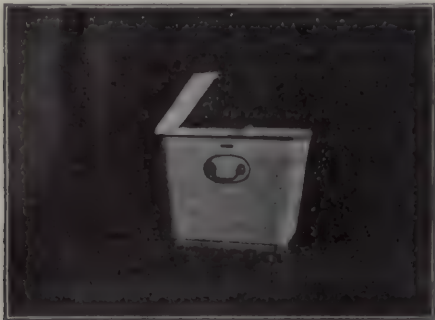


FIG. 5.—RECEIVER FOR SOILED DRESSINGS.

devised. In some the patient can have the bath in the recumbent posture, which is a decided advantage. In others the patient sits upright, his head only showing outside the cabinet.

AN ISOLATION ROOM.

Adjoining the skin wards a room should be provided for the isolation and treatment of diseases of the skin, such as scabies, etc. The linen and other articles used in this room must be kept separate and distinct; the linen should be specially marked, so that it may be thoroughly disinfected and washed in

order to avoid the possibility of it getting mixed with the other linen of the hospital.

THE GYNÆCOLOGICAL ROOM.

In the gynecological unit, although only one large ward is required, a side ward large enough to accommodate three or four patients should adjoin the ward, so that patients who have undergone

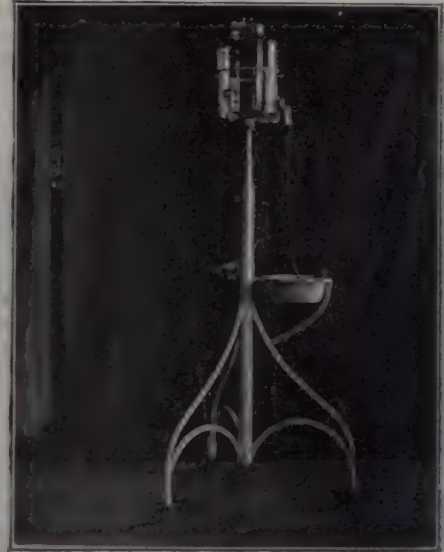


FIG. 6.—IRRIGATOR STAND.

serious abdominal operations may be kept perfectly quiet for at least the first 24 hours after operation.

The unit for septic cases should either be designed as a separate building or be placed as far as possible from any other surgical ward. It is necessary to provide a small operating room for these septic cases, but no accommodation for students need be made.

THE TREATMENT OF BURNS.

Special provision should be made for burns in order that severe cases may be treated in water baths. These latter should be supplied with warm water and an arrangement made whereby this warm water can be mixed with cold according to requirements. A constant flow must be maintained to ensure its purity. The patient is suspended in the water in a special form of hammock. Air or water cushions may be utilised to add to his comfort. The bath should be emptied and thoroughly cleaned out every day, and this can be done without removing the patient. By means of this special arrangement severe burns of the buttocks, back, and thighs can remain in the bath practically undisturbed for weeks or even months. It is important that the water be regularly changed without allowing the temperature of the bath to drop below 99° to 100° F. This is an expensive form of treatment, as constant supervision is required, but when a hospital is situated in a district where severe burns, such as from molten metal, are frequently admitted, the expense is justifiable.

THE MANSION HOUSE AND THE HOSPITALS.

THE BANQUET FOR THE NORTH-EASTERN HOSPITAL FOR CHILDREN.

SOME captious critics have declared that the Lord Mayor, during his year of office, ought not to use his influence to the fullest extent to promote the welfare and development of particular charities, to whose interest he has devoted a large measure of his time and energies, before he entered the Mansion House. We hold distinctly that every Lord Mayor, if he is to discharge fully the duties which devolve upon him, must make an infinitely better representative of the City during his residence at the Mansion House if he has previously identified himself with institutions and movements for the benefit of his fellows. In such a case he is not only justified, but bound, to use the influence of his position to help forward the work of such institutions during his year of office. A former Lord Mayor, Sir Marcus Samuel, gave a banquet at the Mansion House on behalf of the London Hospital, which was probably the most instructive and helpful dinner ever held on behalf of a great charity.

Sir William Treloar has championed for many years the cause of crippled and injured children. He is the founder of the annual Christmas banquet at the Guildhall to these little sufferers, and in connection with this work has been the means of doing an immense amount of good. He is endeavouring to raise a sum of £60,000 to place this movement upon a permanent and adequate footing, and we hope he may succeed in securing all the money necessary to accomplish this very desirable object. All honour to Sir William Treloar for his noble work on behalf of helpless children, and for his courage in continuing that work energetically during his mayoralty. There is no man or woman of feeling or character in the land to whom the sufferings of children do not appeal, and everybody should send something this year to the Lord Mayor for his fund.

It is matter for congratulation, though not for surprise, that Sir William Treloar should have given a banquet on behalf of the funds of the North-Eastern Hospital at the Mansion House on the 28th ultimo. Of all the children's hospitals the North-Eastern Hospital for Children in the Hackney Road, Bethnal Green, should appeal with accumulated force to every philanthropist who is desirous of giving his money carefully and intelligently. The speakers at the Mansion House had a very easy task. There is no object which lends itself better to true eloquence than the cause of the children, and the North-Eastern Hospital has made so much progress recently that the speakers found no difficulty in making their appeals effective.

When we inspected the hospital a few days ago we found all the children bright and happy, and the wards free from the incessant crying which sometimes marks inefficient administration of a children's ward. The extension of the hospital, with the addition of balconies, have had a marked effect upon the health of the children. These balconies

facilitate arrangements whereby the children live much in the open air, and although the outlook is merely on to a main thoroughfare, or roofs and chimney pots, the fact of being continually in the air gives to the town child robustness and vitality, which are so often absent in a great city like London. Indeed a visitor to the wards might well ask himself, on seeing the children, are these patients really ill at all? Another feature of the hospital is the spotless cleanliness and excellent order, testifying to considerable administrative gifts upon the part of the matron and her staff. These features were so marked in the Nurses' Home that we were led to the conclusion that one spotless bath had never been used. On inquiry, however, the Home Sister was able to satisfy us that this bath had been often used, a fact which testifies to the excellence of her method and organisation. One point came out clearly in regard to the Paris picnic and what nurses are likely to see there. One of the French doctors, when shown the excellent home for nurses at the North-Eastern Hospital, expressed his surprise at such accommodation being provided for attendants on the sick. This is of course merely an indication that at the present time there are practically no trained nurses in French hospitals, and that the old bad system under which anybody was thought good enough to attend the sick is still largely prevalent. Paris therefore, at present, is not a field of instruction for trained nurses, but we are glad to think that the warm friendship which now exists between the French and English peoples is calculated to change all this for the better.

Economically the hospital is well administered. It does a great deal of work in circumstances rendered difficult by the want of an adequate outpatient department, and it has one special feature which we regard as a novelty. Owing to a desire to prevent as far as possible the risk of introducing an infectious disease into the wards, no visitors are permitted to see the patients, except in very severe cases. The average residence of each patient is about twenty-three days. The absence of visitors simplifies the work of the hospital, and has proved in all respects beneficial to the patients, and not unpopular with the parents. In the result we understand that the system of excluding visitors is likely to become much more general in connection with children's hospitals in the future, than it has been in the past. The management takes care, by permitting cots to be endowed for life, or in perpetuity, to be associated with individuals or congregations or schools; and in various other ways to afford an infinite variety of interests which can all obtain representation, by gifts, in the work of the hospital. In this way the funds have been extended, and the income improved. The hospital needs more annual subscriptions, and we strongly recommend any one interested in children to make a point of visiting it, for they are likely, in this way, to experience a good deal of pleasure, and to be attracted permanently to the work.

NEWS AND COMING EVENTS.

A THREE days' bazaar in aid of the funds of the Twerton Infirmary realised a sum of £500.

THE Handel Cossham Memorial Hospital at Kingswood, Bristol, will be opened by Mr. Birrell, M.P., on June 1. The hospital has been built and endowed out of a legacy of £110,000 left by the late Mr. Handel Cossham.

Sir Arthur Rucker, M.A., D.Sc., LL.D., F.R.S., Principal of the University of London, will distribute the prizes to the successful students at Guy's Hospital on Thursday, July 4 next. The usual garden party will be given in the grounds.

A FESTIVAL dinner in aid of the funds of the Mount Vernon Hospital for Consumption and Diseases of the Chest, Hampstead and Northwood, will be held on Monday, June 24, 1907, at the Hôtel Cecil, Strand, W.C. Henry Stedall, Esq., Chairman of the Committee of Management, will preside.

THE matron and nursing staff of the Gordon Hospital, Vauxhall Bridge Road, are organising a sale of work in aid of the fund for renovating the wards. The sale will be opened at the hospital on Tuesday, June 11, at three o'clock, by Her Highness the Ranee of Sarawak (Lady Brooke). Princess Victoria and Princess Louise of Schleswig-Holstein have promised to be present.

UNDER the auspices of Sir William Treloar, Messrs. Bemrose and Sons, Ltd., will publish "Crutches to Help Cripple Children," on June 5. The book will be edited by Sir James D. Linton and Sir Douglas Straight, and has a unique list of contributors in art and letters. The publishers are sparing no efforts to produce it in an attractive manner, and the new colour printing process is being employed to good effect. It will be published at 1s. net, and obtainable through all booksellers.

COMMEMORATION DAY of Livingstone College falls on Wednesday, June 5. At 3.30 p.m. on that day a meeting will be held in the college grounds, when short addresses will be given by old students of the college who have been medical missionaries in the Congo, Southern Rhodesia, and India. Sir John Kennaway, Bart., M.P., President of the Church Missionary Society, will take the chair. The college will be open for inspection, and all friends of the institution will be cordially welcomed.

THE recently announced death of Dr. Robert Barnes at the advanced age of 90 recalls his singularly varied and distinguished career as the foremost obstetrician of his day. Dr. Barnes was unique in having held appointments on the staffs of three London general hospitals and their medical schools, as well as of five other less prominent institutions. His "Lectures on Obstetric Operations" is the one classic work which no subsequent text-book on midwifery has failed to quote copiously. For many years a prominent contributor to the *Lancet*, his interest in medical literature continued active until very lately; indeed, more than one article from his pen has appeared during the present century in the "Hospital Gazette" of his old school, St. George's. Nor did literature and his own specialty absorb all his energies; throughout life Dr. Barnes was a man of wide culture and many attainments. His death removes a venerable figure from the medical world; a consultant who began work in general practice, his name has always stood for the highest and best ideals in the special line to which he afterwards devoted himself.

EARLY in the year the committee of the Gateshead Children's Hospital made an appeal to the public for £4,000 to enable them to increase the much needed accommodation at the institution. At present the 22 cots are all occupied, and 21 cases are awaiting admission. The proposed extension will include two large wards of 16 beds each, with two smaller wards, and the necessary accessories. Already £1,623 12s. has been promised.

LAST week the staff at the Poole Cornelia Hospital entered into possession of the new premises erected, at a cost of nearly £5,000, in Ringwood Road, Longfleet, almost next door to the Longfleet St. Mary's Church. They had not been in long when the first accident was brought in. The new hospital was formally opened on Thursday, May 23. The old hospital in Market Street, just vacated, is being acquired by the Poole Corporation for municipal offices, etc., at a purchase price of £1,600, and is to be converted into suitable offices at an expenditure of another £1,000. To the great regret of the promoters of the scheme for a new hospital, the public has not subscribed to the building fund as was very reasonably expected they would do, and it is feared that the £1,600 to be received from the Poole Corporation for the old building will have to go to the building fund, and not to the endowment fund, as was very much desired and hoped.

PRINCESS CHRISTIAN has opened the new sanatorium for consumption at Benenden. The sanatorium, which is situated about six miles from Cranbrook Station, stands about 250 feet above sea-level and faces due south. When completed it will consist of four main sections—a central block of two storeys, accommodating 68 patients, of whom 20 are in single rooms, and the remainder in double-bedded rooms, a number of pavilions, holding ten patients each, an administration block and dining-hall, and a laundry and electric light block. The main building is of steel framing throughout, the space between the girders and stanchions being filled in with "Frazzi," cement rough-cast on the outside and plastered on the inside. This construction has the advantage of being warm in winter and cool in summer, it is fireproof, and it is economical, the total cost for the accommodation of 200 patients at Benenden being £20,000, or £100 per bed, a figure which is much lower than has yet been reached in the case of any other building of the same kind.

HOSPITAL DINNERS.—The annual dinner of the Royal Hospital for Incurables was held on May 16, at the Hôtel Metropole, under the presidency of Sir Walter Vaughan Morgan. The hospital dates back to 1854, and its first chairman was Charles Dickens. As a result of the special appeal issued in connection with the dinner a total sum of £3,295 has been contributed towards the funds of the institution.—The Royal Waterloo Hospital's annual dinner took place on the 17th inst. at the Savoy. The Duke of Argyll proposed "Prosperity to the Hospital," and stated that the sum necessary to liquidate the building fund debt and to complete the new building was £35,000. Subscriptions amounting to £1,300 were received.—Baron von Stumm, German Chargé d'Affaires, presided at the 62nd anniversary dinner of the German Hospital, Dalston, which was held at the Hôtel Metropole on May 13. The expenses of the hospital amount to £11,000 a year, and the cost per occupied bed is the lowest in any hospital of the same size in London. Additional accommodation is urgently needed. Subscriptions to the amount of £3,758 were announced at the dinner, including £200 from H.I.M. the German Emperor, and £50 from the Emperor of Austria.

MEDICO-LEGAL DEPARTMENT.

THE PREVENTION OF MILK ADULTERATION.

MEDICAL OFFICERS AND OTHER LEGAL POWERS.

SECTION 9 of the Sale of Food and Drugs Act, 1875, enacts that no person shall, with the intent that the same may be sold in its altered state without notice, abstract from an article of food any part of it so as to affect injuriously its quality, substance, or nature, and no person shall sell any article so altered without making disclosure of the alteration, under a penalty in each case not exceeding £20.

The Board of Agriculture, under Section 4 of the Sale of Food and Drugs Act, 1899, issued in 1901 certain regulations with respect to the sale of milk. These regulations provide that where a sample of milk (not being milk sold as skimmed or separated, or condensed milk) contains less than 3 per cent. of milk fat, it shall be presumed for the purposes of the Sale of Food and Drugs Acts, 1875 to 1899, until the contrary is proved, that the milk is not genuine by reason of the abstraction therefrom of milk fat, or the addition thereto of water. Where a sample of milk (not being milk sold as skimmed, or separated, or condensed milk) contains less than 8.5 per cent. of milk solids other than milk fat, it shall be presumed, for the purposes of the above Acts, until the contrary is proved, that the milk is not genuine by reason of the abstraction therefrom of milk solids, other than milk fat, or the addition thereto of water. Where a sample of skimmed or separated milk (not being condensed milk) contains less than 9 per cent. of milk solids, it shall be presumed for the purposes of the above Acts, until the contrary is proved, that the milk is not genuine by reason of the abstraction therefrom of milk solids other than milk fat, or the addition thereto of water. Presumptions are, of course, capable of being rebutted. Milk below the standard is not necessarily adulterated, and milk above the standard is not necessarily genuine.

Although the quality of genuine milk offered for sale will usually be well above the official limits of milk fat and non-fatty solids, there may occasionally, and especially in certain seasons of the year, be cases in which a sample of genuine milk may fall below those limits. To meet cases of this kind the Board of Agriculture suggest that in the absence of any special circumstances indicating that the case is a fraudulent one, the local authority might, in the first instance, call the vendor's attention to the analyst's report, and ask him whether he desires to offer any explanation, and if the explanation is one they are able to accept they might, in the exercise of their discretion, refrain from the institution of proceedings or withdraw any summons which, in order to prevent the failure of proceedings, by reason of the time limit imposed by the Act, it may have been necessary to take out. But it may be desirable that further samples of milk should be taken in such cases, in order that a satisfactory conclusion as to the character of the milk supplied may be arrived at.

The Milk Regulations Committee reported that the evidence submitted to them went to show that it was a common practice to add gelatin to cream for the purpose of giving it a fictitious appearance of richness or thickness. Local authorities are urged to take steps to ascertain whether this form of adulteration is practised within their districts, and if a public analyst reports the presence of gelatin or other similar substances in a sample of cream, the local authority concerned should consider whether the case is one in which proceedings might not with advantage be instituted under Section 6 of the Sale of Food and Drugs Act, 1875.

Milk is an article which varies very considerably in composition, the differences arising partly from the breed of the cow, and partly from the way in which the animal is fed and housed. There is also a perceptible difference between the milk given by the same cow at different times of the year. Separated milk is sometimes sold as skimmed milk, and such a sale is a fraud upon the purchaser, because considerably more fat can be removed by a separator than by the ordinary method of skimming, and is punishable under the Acts.

If at the time of sale the vendor gives notice to the purchaser that the cream has been abstracted, he is not liable under Section 6. But if no such notice has been given it is no defence to a prosecution under Section 6 for him to plead that he had no knowledge of the alteration at the time of sale—unless, of course, he can produce a written warranty in accordance with the provisions of Section 25 of the Sale of Food and Drugs Act, 1875. It was held in *Dyke v. Gower* (1892, 1 Q.B. 220) that the words "so altered" in Section 9 refer to a physical alteration of the article, irrespective of the intent with which the alteration is made. In *Morris v. Corbett* (56 J. P., 649) the servant of C., a dairyman, being short in his supply of milk, bought two gallons from another dairyman and mixed it with his own and sold the same to customers. It was held that though neither C. nor C.'s servant knew, or had reason to suspect the milk was adulterated, this was no defence.

A special contract between vendor and purchaser as to the quality of the articles to be delivered by the former is no bar to a conviction under Section 9 of the Act of 1875. In *Fecitt v. Walsh* (1891, 2 Q.B. 304) the appellant contracted to supply milk to a workhouse at a certain price; by the contract the milk was to contain a certain percentage of cream; it was to be tested on each delivery, and a reduction was to be made in the price in respect of any deficiency in cream. While the daily supply, contained in five cans, was being delivered at workhouses the respondent procured a sample from each of the five cans; there being a large deficiency of cream in two of the samples the respondent subsequently laid two separate informations against the appellant in respect of these two samples. The justices convicted the appellant in a separate penalty upon each information. It was held that the procuring of each sample was a separate transaction, that the appellant had committed a separate offence as to each case in respect of which an information was laid. That the separate informations were therefore properly laid, and the convictions were right. In *Jones v. Davies* (69 L.T. 497) the respondent sold to the appellant a tin of skimmed milk, which purported to be, and was sold as marked upon a label upon the tin, "Condensed milk." On another part of the label in smaller print it stated that "this tin contains skimmed milk." As to whether there had been a sufficient disclosure within the meaning of Section 9 it was held that the label on the tin was a disclosure of the contents of the tins. In *Platt v. Tyler* (58 J.P. 71) P. was charged with selling condensed milk, from which 80 per cent. of fat had been abstracted without making disclosures of the alteration. The purchaser was told it was skimmed milk and pointed to a label on the tin, which, in smaller type, stated the milk to be skimmed. The justices held the disclosure insufficient, and convicted P. It was held that the justices were wrong, and that the disclosure was sufficient.

In *Spiers & Pond v. Bennett* (1896, 2 Q.B. 65) milk was delivered under contract at a refreshment room of the appellants; it was handed in a can to one of their servants, who poured a portion of it into a churn, which was placed on the counter for the purpose of the milk being sold to customers; it was so poured that a less proportion of cream was in the milk that went into the churn than in the milk which remained in the can. The respondent bought a glass of milk at the counter; the milk was drawn from the churn, and on analysis showed a deficiency of 17 per cent. of cream. Upon the glass in which the milk was served were engraved the words: "Not guaranteed as new or pure milk or with all its cream; see notices"; and upon the refreshment counter was a printed notice to the effect that all milk sold by the appellant was purchased by them under a warranty of its purity and genuine quality; that they took all possible precautions to ensure its supply to their customers in proper condition, but were unable to guarantee it as new, pure, or with all its cream, and did not, therefore, sell it as such. It was held that, assuming that the facts showed an abstraction from the milk, there had been a sufficient disclosure by the appellants of the alteration to satisfy the requirements of the section.

NURSING ADMINISTRATION.

THE FINANCIAL ASPECT OF THE PROBATIONER.

THEORETICALLY the number of first-year probationers is a quarter of the entire staff. Practically the number varied in 1905 from 58.5 per cent. at St. George's Hospital and 60.3 at the Meath Hospital, Dublin (both including paying pupils) to 12.9 at the Charing Cross Hospital and 15.6 at the Dundee Royal Infirmary. The average in nine London hospitals with medical schools was 33.2; in six provincial hospitals with medical schools 27.1. In hospitals without medical schools the figures are:—Average of six London general hospitals, 29.1; average of 28 provincial general hospitals, 28.2. Among the nine hospitals with medical schools in London there are several which take a large number of paying pupils. If these were deducted the average for this group would be much the same as in the other hospitals—namely, just above the normal 25 per cent. required to renew the staff every three years. In order to get a fair idea of the financial cost of the probationer, it is necessary to consider, first, what expense her presence entails upon the hospital; and next, what the hospital receives from her in return.

The annual cost of the probationer is calculated with some exactitude in "Burdett's Annual." Taking it at the minimum it works out per head as follows:—

| | £ s. |
|---|------|
| Collective expenses of the Nurses' Home, including rent, rates and taxes, water, light, heating, service, linen, cleaning, crockery etc., repairs, renewals, and miscellaneous items | 10 0 |
| Board | 20 0 |
| Laundry | 6 10 |
| Uniform | 1 10 |
| Lectures and examinations | 2 0 |
| Total (exclusive of salary) | 40 0 |

This is a very low estimate, the cost of board frequently amounting to £26 or £30 a year, and the collective expenses of the home being often higher than £10.

In addition to those things received by the probationer which have a direct monetary value, she is the recipient of a great deal of unpaid service in the way of instruction from all concerned with her, doctor, matron, ward sister, staff nurse. But it may fairly be contended on her side that the labour which she entails is more than compensated by the freshness she brings to her work.

It must now be considered what the hospital receives from the probationer. She is completely untrained in the work that she has to perform. She can bring no skill or knowledge, she has everything to learn. But she is no child. She is in the prime of life, at an age when, if she is ever to be of any use in the world, all her faculties are at their highest point of efficiency. She gives herself unreservedly. In other kinds of work there are opportunities for doing things for herself, seeing her friends, making her clothes, reading, or keeping up other pursuits, possibly supplementing her salary in sundry small ways. In hospital her entire time is surrendered

to her duties with the exception of such recreation hours as are essential to health. She must be deaf to the call of family festivity, even, it may be, of family emergency. She must be content to be tired every day to the point of intense fatigue. She must devote every faculty and all her will to the end in view, the proper performance of duty. And she does not long remain unskilled. She is a probationer for three years, but it is only during the first six months that her labours are absolutely unskilled. By the middle of her second year she is a responsible person, able to take charge on occasion, and from then on she steadily grows in value to the institution. How do these things balance against what she receives from the institution? During her three probationary years she receives in kind, in board, lodging, and other benefits the equivalent of at least £120, and, in addition, entering the hospital an unskilled worker, she leaves it with a profession which will bring her a good living in almost any part of the world. There can hardly be two opinions about the fact that in her first year she is a debtor to the hospital, and is by no means able to render services equivalent to her maintenance. But does this right itself as her training goes on, so that at the end of her probation she may feel that she has not only repaid the benefits received, but is also entitled to a salary? Taking all things into consideration, we are disposed to think that the balance of benefit still remains on the side of the hospital, and that no injustice is done to the nurse when she serves her third year unpaid. Yet, with one or two exceptions, all hospitals pay their third-year probationers, and a small salary is commonly given also during the second year. The fact, however, that such salaries are paid does not completely establish the fact that the probationer is entitled to payment, on account of the value of her services. There are grave disadvantages in retaining in the service of the hospital a large body of unpaid workers, however liberally they may be recompensed for their labours by comfortable maintenance and skilled instruction. And these drawbacks are so considerable that it is found in practice better by many institutions to pay a small salary, as pocket money, from the outset of the probationer's career. There are certain expenses in clothing, journeys, etc., which no nurse can escape, and if she is earning nothing she is apt to fall into debt, and so make a false start from the beginning. It is quite reasonable to expect the probationer to come provided with means to defray such little expenses, but the only way in which to ensure this is to require an entrance fee sufficient for the purpose, and return it as salary during the first year. This is the plan adopted by the Blackburn and East Lancashire Infirmary, the Nottingham General Hospital, the Swansea General Hospital, the Royal Hants County Hospital, the Adelaide Hospital (Dublin), and the Dublin House of Industry Hospitals. The plan has so much to recommend it that we are surprised it is not in more general use.

THE COMMON TASK.

Correspondence and Queries for this section should be sent to the Editor of THE HOSPITAL, 28 Southampton Street, Strand, London, and marked "Nursing Administration."

THE PRICE OF BEEF TEA.

IN compliance with the desire expressed by the managers of certain institutions to compare the price of ordinary beef tea with that of preparations made by the addition of boiling water to concentrated extracts, we have procured samples of eight different varieties of the latter, and now place before our readers in alphabetical order particulars of the cost per pint of making each kind, together with a general summary of the qualities and food value of each brew, so far as these have been communicated to us by the manufacturers.

Brand's Fibrous Beef Tea.—"This is made from the finest fresh British beef." Sold in three-lb. tins, for the supply of hospitals and other charitable institutions at 10d. per lb. The three-lb. tin is estimated to produce at least seven pints of strong beef tea. The cost works out at 4½d. per pint.

Invalid Bovril.—This preparation is specially prepared for institution use, and is supplied packed in 7-lb. tins at the rate of 4s. 6d. net per lb. The quantity required for making one pint of beef tea is ¾ oz., and the cost, therefore, works out at almost exactly 2½d. per pint. The analysis of ordinary Bovril given in "Allen's Commercial Organic Analyses" is as follows:—

| | |
|--------------------------------------|-------|
| Water | 21.16 |
| Insoluble proteids, meat fibre, etc. | 8.47 |
| Soluble proteids and gelatine | 8.19 |
| Meat bases | 16.13 |
| Non-nitrogenous extractive matter | 29.23 |
| Mineral matters | 16.82 |

It is claimed for the "Invalid Bovril," in addition, that it is specially enriched with soluble proteid, and provides a percentage of nitrogenous matter, "in accordance with the pronounced views of many dietetic authorities."

Lemco and Oxo, and Nursing Oxo.—Liebig's Extract of Meat Co. Lemco, formerly known as Liebig's Extract, packed in 7-lb. jars for institution use, is sold at 5s. 6d. per lb. One pound is estimated to produce 60 pints, the cost, therefore, working out, when bought in large quantities, at 1 1-10d. per pint. It is "concentrated essence of beef without any addition whatever; it contains no fat."

Mason's Beef Tea.—George Mason and Co. "Contains not only the extractives of the meat, but the muscular fibre also in a finely comminuted state." According to the *Lancet* analysis, "the amount of meat fibre is 3.74 per cent. The extractives and albuminous matters in solution amount to 12.95 per cent., of which 2.37 per cent. is due to mineral salts." The cost of this preparation, as supplied in bulk to hospitals, works out at rather less than 3½d. a pint.

Nursing Oxo.—This is a peptonised and unflavoured preparation of Oxo. It is claimed that the inclusion of meat peptone gives it additional value as a liquid food in illness. Sold in 14-lb. tins

it costs 4s. per lb., and at 22 pints to the pound it works out at a cost of 2 1-5d. per pint.

Oxo.—Sold in 7-lb. tins for institution use at 3s. 9d. per lb. It is estimated that 22 pints can be made to the pound. The cost is, therefore, 2d. per pint.

Oxvil.—F. L. Borthwick and Co. Two ounces of this preparation will make one pint of beef tea, and the cost works out at 5d. per pint. "Contains the albumen and fibrin, together with the soluble extract of fresh beef."

Ramornie.—Liebig's Extract of Meat, as prepared by the Australian Meat Company. Supplied in large quantities for institution use at about 5s. per lb. The amount given in the directions for making beef tea is ¼ oz. to ¾ pint of water. The cost, therefore, works out at a little over a penny a pint.

Lastly we have ordinary beef tea, which may be prepared in various ways and at a widely different cost. The usual method we have found practised in institutions is to shred the meat as fine as possible, to add cold water in the proportion of a pint to a pound, and to stew gently for several hours. The cost varies, as will be seen with the price of the beef. The average is 4d. a pound, though this is considerably more than need be paid. Dr. Rideal's experiments went to prove that in making beef tea after this fashion a large residue of nutritious matter remained adhering to the rags of beef after the infusion had been strained off; if a second infusion were made the cost of the tea was reduced in proportion to the amount of water subsequently added. Moreover, foreign meat can be obtained at prices varying according to the state of the market, from 2d. to 3d. a pound, or even less when the whole shin is purchased. Thus, it would be possible to reduce the price of ordinary beef tea to 1½d. or 2d. a pint. No analysis can be given of ordinary beef-tea for the reason that it differs enormously in results even when carefully prepared from the best recipes. It has been calculated that for every 100 beds a hospital consumes something like 10,000 pints of beef tea in a year. The question, therefore, whether to use prepared beef tea, or that made on the premises from fresh beef, is seen to be one of considerable importance. We propose to consider the matter from a different standpoint on another occasion.

WASTE IN POOR-LAW INFIRMARIES

We are interested to see that the question of avoiding waste in these institutions has been engaging the attention of the Society of Poor-law Workers, who had the problems connected with it under discussion at their meeting this week at Aubrey House, Kensington. It seems that the great bar to economical administration is the complicated system of accounts in use, and that until the accounts are simplified little can be done. We commend to the guardians a study of the "Uniform System of Accounts" (Scientific Press).

LIGHT WINES AND TEMPERANCE DRINKS.

Their Chemical Composition and Physiological Action.

At the present time, when the question of alcoholic beverages is allotted so much space in both lay and medical papers, one feature of the controversy must strike every careful reader. This feature is that while in the copious articles recently published upon this subject theories and opinions abound, facts are lamentably absent. In the language of a distinguished living chemist, "it is far easier to scratch one's head than to burn one's finger," or in other words to discuss philosophically what may be than to go into the laboratory and find out what is. In the report which we intend to publish shortly we have first of all confined our attention to the action of alcohol, and have shown clearly that this substance when taken in quantities corresponding to moderate wine drinking, has a favourable influence upon the digestive processes, helps us to get the most value out of a given quantity of food, and must in every way be regarded as a proper and

profitable constituent of the diet calculated to fulfil the exigencies of modern life.

The report deals next with the chemical properties and dietetic effects of the light table wines. For this purpose we have examined an exhaustive series of clarets, moselles, hocks, and champagnes, and have shown by ascertained facts the beneficial influence which these beverages exert upon each stage of the complicated process of digestion. This inquiry has enabled us further both to separate wheat from chaff, or good wine from bad, and to indicate the general principles which should guide the medical profession in directing the use of different wines to different individuals. Last but not least we have been able to point out in general terms the amount of wine which is beneficial and the amount likely to be injurious.

The report concludes with an experimental inquiry into the effects of tea and temperance drinks upon digestion, and shows clearly how favourably wines compare with the above beverages.

EDITOR'S LETTER-BOX.

[Our Correspondents are reminded that prolixity is a great bar to publication, and that brevity of style and conciseness of statement greatly facilitate early insertion.]

"MEDICAL TITLES."

SIR,—The annotation on "Medical Titles" is full of spite and altogether objectionable. I happen to be an M.D.(Lond.), and, notwithstanding the disparaging remarks of your contributor, I am rather—I almost wrote, naturally—proud of my possession. I do not deceive myself by thinking that the degree confers upon me ability. I do not even believe that it adds an atom to my professional status among the laity. But I certainly think I should be credited with having passed a certain professional test which my brother practitioners here have not.

While I do not consider myself superior to my medical brethren, *ipso facto*, for being a real, live "doctor," yet I contend that it is wrong for them to pose as such when they are not, and to emulate my position by falsely styling themselves "doctor" on their door-plate or bill-heads. There is no necessity for them to do this, and by doing it they undeniably demonstrate their belief in the advertising value of the title to which they have no academic claim.

My mind may be of a "juvenile order," but for the life of me I cannot see any disgrace in passing "a moderately difficult examination," or any credit due to a licentiate or member for failing or shirking it. On the other hand, my experience teaches me that a very large majority of the

latter have pigeon-holed for ready use voluble excuses for not being M.D.s or F.R.C.S.s!

You ask for suggestions. Allow me, Sir, to offer one: award honour where it is due, and do not discount industry and give offence to your readers by disparaging the medical degrees of London University, but rather condemn the advertising methods of those medical men who seek lucrative practices by "plating" claims which are calculated to attract the public, and who prefer to tout for appointments than qualify for them by exams.

Yours, etc., J. GRIMSHAW.

Holly Bank Road, Clifton Park, Birkenhead.

May 25, 1907.

THE VENTILATION OF THE SOUTH-EASTERN HOSPITAL.

SIR,—We notice in your issue of May 25 a paragraph to the effect that the South-Eastern Hospital, of which we are the architects, has been ventilated on the "Boyle" natural system. This is not the case; the system is purely mechanical by means of fans, and was designed by ourselves.

Yours truly,

May 27, 1907. THOS. W. ALDWINCKLE & SON.

[We published the statement as we received it from Messrs. Robert Boyle and Son, 64 Holborn Viaduct, London, who now write, under date May 29, that 32 of their patent air-pump ventilators were supplied and fixed on the external brick upcast shafts in connection with the wards of the latest additions to the South-Eastern Hospital.—ED.]

THE HOSPITAL

June 1, 1907.

Name

Address

This Coupon must accompany manuscript or contributions intended for THE HOSPITAL.

The Hospital

A JOURNAL OF

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SATURDAY, JUNE 8, 1907.

THE CONTROL OF SUPER-NORMAL ARTERIAL PRESSURE.

THE invention of various forms of apparatus by which the arterial pressure can be measured under the ordinary conditions of clinical practice, has caused a wide appreciation of the influence exercised by blood-pressure in the production of pathological disturbances and diseased processes. Possibly there is at present a tendency to over-emphasise the prevailing fashion, and it may be that the various instruments do not record quite so accurate a statement of the circulatory condition as is claimed for them. Still there can be no question that the movement by which the clinician is able to approximate his observations to the precise method of the scientific laboratory is a distinct gain to practical medicine. Among the various workers in this department the name of Dr. George Oliver well deserves honourable mention, and the fact that his patient and ingenious observations are the products of clinical rather than laboratory investigations will not lessen his authority with the practising physician. After all, at the bedside of the individual patient there are conditions which cannot be reproduced in the laboratory. Dr. Oliver's work has been pursued, mainly at least, in the exact circumstances which occur in practice, and for that reason, as well as for its essential merit, it demands careful attention. In his latest paper on the subject, read a few weeks ago before the Therapeutical Society, he deals with the methods by which excessive arterial pressure may be kept in check, and shows how important is the scope of treatment in this direction.

First, on the question of diet in cases of abnormally high blood-pressure. Here evidence is distinct that a reduction of quantity as well as a modification of quality is needed. The meals should be small, and those foods which stimulate cardiovascular activity should be taken in strict moderation. There is a general agreement that flesh meat falls among this number, and for the most part the indictment is urged against the "red" rather than the "white" meats. But Dr. Oliver finds that all of them—beef, mutton, fish, poultry, etc.—come under much the same condemnation so long as they are roasted and taken with gravy. The method of boiling rather than of roasting is to be preferred,

and meat extractives, such as soups and beef teas, ought to be entirely excluded from the diet. The use of green vegetables and of fruits, on the other hand, is to be encouraged, and carbohydrate foods may be taken in moderation. The diet, in short, should be of an ordinary plan on a reduced scale, with a somewhat smaller proportion of animal and a larger proportion of vegetable foodstuffs than is common. It is satisfactory to have this statement advanced on the basis of exact measurements made under clinical conditions. So many dietetic schemes have been urged on what have been claimed to be scientific reasons, and have proved themselves in practice to be unsatisfactory, that not a few practitioners refuse to listen to any discussion on the specific values of foodstuffs outside the teachings of practical experience. Here, however, are results which stand on a very different footing, and though they agree generally with common opinion, they show the necessity of modifying this in certain detailed directions.

Next to foods comes the question of beverages and condiments, and here again Dr. Oliver's measurements oppose the adoption of extreme courses. Fluids, and especially soft non-aerated water, may be taken freely, by preference, when the stomach is empty—that is night and morning or before meals. Tea and coffee are among the favourite victims of the faddist, but provided that they are not taken in excess, and do not cause obvious ill-effects to the individual patient, there is no reason to exclude them. Alcohol, as might be expected, is found to be generally inadvisable in cases of high blood-pressure, though in cases in which the measurement is only slightly above the normal, small quantities are not found to be injurious. As regards the use of chloride of sodium, so much has recently been said as to the injurious effects of this in renal inadequacy that it is satisfactory to know that Dr. Oliver has carefully studied its relation to cases in which, without appreciable organic changes in the kidney, there is an abnormal level of blood-pressure. He does not find any distinct claim for the prescription of a strict chloride-free diet in these cases, though as a temporary measure, when accessions of pressure arise, it may be adopted with advantage. In this connection it is necessary to

note that to obtain such a diet the mere omission of salt as a condiment is not sufficient; the selected foods themselves must be those naturally free from sodium chloride. Practically, a satisfactory diet scheme for such a purpose may be found in vegetable soups (made without meat stock), fresh green vegetables, fruits, nuts, fats (fresh butter, cream), salt-free bread, farinaceous vegetables (potatoes, rice, peas), and sugar. This, as already said, may meet a temporary aggravation of high pressure, but, other reasons apart, it is too insipid a programme to be continued for more than a week or two. Of the value of rest, exercise, electricity, and baths, Dr. Oliver has much to say that is both valuable and interesting, but space forbids its discussion here. Speaking generally, his conclusions are in harmony with the prac-

tice of most men of moderate opinions, though they correct these on certain points of detail. And they have the additional value that they are based, not upon empiricism, but on serious physiological and clinical study.

Regarding drugs, Dr. Oliver does not hesitate to say that they are advisable or necessary in most cases. Evacuants and intestinal antiseptics have an assured position, but some of the other observations are of decided interest. Among these may be mentioned the capacity of thyroid gland and of salts of hippuric acid to reduce abnormal blood-pressure, and the conclusion that potassium iodide has no efficacy in this direction. This last remark contradicts many clinical statements, but it is in entire harmony with the verdict of pharmacological experiment.

THE PROVISION OF PUBLIC ABATTOIRS.

SINCE the revelations made last year of the methods employed by certain American packing houses the popular interest then aroused on the subject of good meat has once more subsided into indifference. At no time has any great heed been paid by the public to the much more important matter of the provision in this country of healthy meat, and of healthy meat only. It is not therefore surprising to find that local authorities have not been quick to avail themselves of their powers of providing public abattoirs. And in this respect the larger towns of this country compare very unfavourably with those of our Continental neighbours. From time to time people become alarmed at the vast possibilities there are of purchasing and consuming unsound food, but with the subsidence of the scare there is a disappearance of all effort to see that the supervision of our food supplies is improved.

It may be said at once that the system prevailing in this country of slaughtering animals under conditions in which adequate inspection is impossible, as in private slaughter-houses, is one of serious public danger. It is not possible with the staff available to inspect the carcasses of the greater number of animals intended for human food. The difficulties of detecting disease in the fragments of meat exposed in a butcher's shop are well known, and the evidence of some of the most dangerous diseases, such as tuberculosis, has, for the purposes of practical inspection, virtually disappeared with the offal. It is recognised that proper protection can be secured only

by the systematic inspection of each animal at the slaughter-house, and that this is impossible where there exist innumerable private slaughter-houses in which slaughtering is carried out at irregular and intermittent periods. The only person present to judge whether the animal be fit for human food in these circumstances is the butcher who is directly interested in the sale of the flesh.

Among other recommendations of the Third Royal Commission on Tuberculosis was one in these terms:—

"1. Where there is a public slaughter-house the Local Authority shall have power to prohibit slaughtering in any other place.

"2. The Local Authority shall have power to require that the meat of animals slaughtered elsewhere than in a public slaughter-house and brought into a district for sale be taken to some place where it may be inspected.

"3. Where a public slaughter-house has been established inspectors shall inspect all carcasses immediately after slaughter and stamp all such as are sound."

Were these recommendations given legislative effect it would be possible to enjoy a sense of confidence in the soundness of our meat supplies that at present is wholly lacking.

The provision of public abattoirs, in fact, is the first—and, so far as our home supplies are concerned, the most essential—step in the development of an efficient system of inspection of our animal food. The utmost we can expect for the present, however, are the sporadic attempts of the more enlightened municipalities to provide private slaughter-houses and so protect their citizens from the grave dangers arising from the present inadequacy of inspection.

ANNOTATIONS.

Mobility of the Kidneys.

DR. HECTOR MACKENZIE'S communication on this subject to the Medical Society of London is one to be carefully noted. He recognises an "abnormally movable kidney" as one in which it is possible to get the hand completely above the upper end of the organ, and to palpate it in its whole extent. In addition, he defines the "palpable kidney" as one in which, though a considerable part of the kidney can be felt, it is impossible to displace it so as to get the hand above the upper end. Among 2,801 females of all ages who were examined, there were found 449 cases in which the kidneys were palpable and 515 in which they were movable, while of 1,607 males only 25 cases showed palpable and 11 cases movable kidneys. In only a single instance was a movable kidney present on the left side alone, while in 49 cases both kidneys were movable. There seems great reason to doubt the commonly accepted statement that repeated child-bearing is an influential factor in the production of abnormal mobility of the kidneys. An important practical point is the degree of disturbance which such abnormal mobility produces, and here Dr. Mackenzie's figures show that out of 526 patients with definitely movable kidneys 411 were wholly unaware of the existence of the condition. This view was confirmed by other speakers, who agreed generally with Dr. Mackenzie's conclusions and with the advice that surgical measures are seldom advisable. In face of all this it is startling to hear from Dr. Suckling, of Birmingham, that "the daily interference with the elimination of urine and retention in the prolapsed kidney and ureter causes auto-intoxication leading to insanity and other disorders of the nervous system," and that "the frequency of suicide when dropped kidney exists is remarkable."

The Practical Applications of Scientific Medicine

IN the *Times* of May 23rd may be found a leading article dealing in an appreciative spirit with the advances which have distinguished the course of scientific medicine during the last half-century, and with the obstacles to the full application of the new knowledge. The writer, naturally, considers more particularly the effects of bacteriology on surgical operations and on the treatment and prevention of infectious diseases. In connection with the latter he finds that the public generally, instead of seeking to secure the application of scientific conclusions which rest upon "as firm a basis of assured knowledge as the phenomena of gravitation," remain passive, or even active, opponents of measures by which many lives might be preserved and much permanent injury to the health of individuals be prevented. Not merely "vestrymen and such-like people," but even some members of Parliament, are included in this condemnation. And this attitude of apathy and resistance is attributed to a want of imaginative capacity to realise either the truths of science or the results which could be secured by their application, and to the absence of the introduction of "physical matters" even into what is supposed to be the highest type of education. It is highly satisfactory

that all this should be set forth in the columns of the lay Press, and its exact correspondence with facts is beyond question. Unless public opinion is educated to appreciate the function which science, and science alone, can discharge in practical life, the attainment of the full results of observation and investigation is impossible. Perhaps no illustration of the large scope of this function can be more forcible than the recent work in connection with Malta fever. The discovery that this disease is due to a microbe inhabiting healthy Malta goats and communicated to human beings through their milk, has been followed by certain steps which have led to most impressive results. Hitherto there has been in Haslar Hospital an average of some two hundred patients suffering from this disease, but last month it was reported that not a single case was included among the patients. Here the necessary measures were independent of public support, and if the same thing were true of certain other diseases, parallel action would be followed by equally good effects.

The General Medical Council and the B.M.A.

THE address delivered by the President of the General Medical Council at the opening of the recent session of that body contained an announcement of great interest to the members of the British Medical Association. It appears that the Association has formally decided not only to investigate cases which might require to be brought officially before the Council, but also to act in support of any charges which may seem to be justified. The Association, in short, has determined, as opportunity offers or demands, to act as prosecutor in certain charges which will require the judicial action of the General Medical Council. In these circumstances it is obvious that the position of those members of the Council who are at the same time members of the Association becomes a very delicate one. Acting in the former capacity, they might appear as judges of causes in which, as members of the British Medical Association, they were more or less interested as complainants. The President of the Council has very properly taken legal advice on the matter, and, acting on this advice, has himself resigned his connection with the Association. Further, he has announced that what he has done is, in the opinion of the legal advisers of the Council, imperative on all other members of the Council who happen to be members of the Association, and this, it will be generally allowed, is in accordance with the fitness of things. The judicial actions of the Council must obviously be entirely beyond suspicion of unfairness and partiality, and members of the Council cannot therefore be also members of a prosecuting association. It is a pretty pass to which the present ruling influences have brought the Association. Defeated in their attempt to elect delegates from the Association to be members of the Council, they have broken out in a new place, with the result that no member of the Association can now be considered eligible for a seat on the General Council. In these circumstances it may be questioned whether the Association is fortunate in its "pastors and masters."

MEDICAL OPINION AND MOVEMENT.

HEROIN has acquired in recent years a considerable reputation as a respiratory sedative. Chemically it is diacetyl-morphine, two of the hydrogen atoms of morphine being replaced by acetic radicals (C_2H_3O). According to Saint Martin and others who have studied its physiological action, this substitution product of morphine is actually more toxic and more dangerous in its effects than morphine itself. It has a weaker action upon the cerebral centres, but its convulsive and paralysing effect on the bulbo-medullary centres is greater. It is fifteen times more toxic than morphine for the rabbit, four and a half times more toxic for the dog, and thirty times more toxic for the donkey. Duhem, in a recent paper on the subject, gives his experience of sixteen cases in which the heroin habit had been acquired. He is of opinion that its use leads more easily to the drug habit than morphia, and that once the habit has been acquired it is much more difficult to cure. During treatment the patient reacts much as a morphomaniac would, but feebleness and prostration are more intense, and respiratory syncope is more liable to supervene. These facts should certainly act as a warning against a too free use of the drug, or a false notion of its innocence.

THE report has just been issued of the Committee appointed by the Home Secretary to inquire into and report upon those diseases and injuries, other than injuries by accidents, that are due to industrial employment, and should be added to the diseases enumerated in the third schedule of the new Workmen's Compensation Bill. The Committee encountered some difficulty in certain cases in drawing a distinct line between accidents and disease, and they took as the distinguishing feature the suddenness with which any injurious effects were produced. A further consideration which largely determined the recommendation of the committee was whether the disease or injury was so specific to the employment that its causation by the employment could be established in individual cases. The difficulty of establishing such a causation in cases of fibroid phthisis and bronchitis has led the committee not to recommend the immediate addition of this disease to the schedule. At a recent meeting of the Staffordshire pottery manufacturers it was resolved that the inclusion of "potters' asthma" in the schedule would act disastrously against employers and operatives alike, and that the disease should be dealt with by methods of prevention rather than compensation. This decision of the Committee therefore will doubtless give satisfaction to the trade. Many conditions of industrial poisoning have been recommended for compensation, and also such conditions as miners' nystagmus, glanders, compressed-air illness, miners' elbow and knee.

SOME interesting papers have recently appeared in the "Journal of the Royal Army Medical Corps" on anti-typhoid inoculation in the Army, which afford convincing facts and arguments in proof of its protective effect against the disease, and of its importance as a prophylactic measure for the Army in

India. The vaccine that has been used is that of Sir H. E. Wright, with some modifications. Soon after it was brought before the notice of the profession by Sir A. E. Wright in 1897, it was used on a large scale in Egypt and India with satisfactory results. Statistics obtained from the hospitals in South Africa during the Boer war showed a much smaller incidence of the disease on the inoculated than on the non-inoculated. The German Army physicians report favourably on its use in the Herrero campaign. In an epidemic which broke out among the 17th Lancers at Meerut in 1905 its efficacy was clearly demonstrated. Of 63 cases of typhoid 61 were in men who were not inoculated, and the remaining two were in men who had refused the second inoculation. It has been determined that the best results are obtained by two inoculations at an interval of ten days. The dosage has been fixed at .5 c.c. of vaccine containing 500,000,000 bacteria for the first inoculation, and double this dose for the second. This amount is estimated to give the maximum quantity of protective substances with the minimum severity of reaction. The reaction consists in local inflammatory signs at the seat of inoculation, together with general feverish symptoms lasting about 36 hours.

DR. T. STACEY, of the Birmingham General Hospital, has made a series of studies on the significance of variations in the level of the diaphragm. In order to determine the level of the diaphragm, the author prefers to rely upon percussion of the gastric resonance, the upper limit of which normally lies in the sixth left intercostal space. Important indications are also obtained by percussion of the area of liver dulness, but Dr. Stacey does not consider the upper level of this dulness such a certain guide in regard to the level of the diaphragm as the signs just noted. The chief interest in his paper, however, lies in the significance which he attaches to an elevation of the diaphragm above the normal level. He lays down the proposition that "When, from any cause, the total volume of blood in circulation is materially diminished, the total bulk of the intrathoracic viscera is correspondingly diminished by the relative emptiness of the thoracic blood-vessels, especially those of the lungs. This diminution in the bulk of the intrathoracic contents shows itself by an elevation of the diaphragm, which has to be maintained at a higher average level than the normal in order to adjust the cubic contents of the thorax to the altered volume of its contained viscera." Dr. Stacey supports this proposition by several cases in which he observed a considerable elevation of the diaphragm above the normal level, and at the same time had good reason to suppose that there was a corresponding diminution in the volume of the blood. The cases included examples of asthenia following enteric fever, severe hæmorrhage, low diet, and anæmia. If these observations receive further confirmation, a "high diaphragm" should be a useful clinical sign in these conditions.

HOSPITAL CLINICS.

"UN SOUNDNESS OF MIND NOT ALWAYS INSANITY."

Notes of a Lecture,

By G. H. SAVAGE, M.D.Lond., M.B., F.R.C.P.Lond., Ex-President of the Neurological Society, Past President of the Medico-Psychological Association, Consulting Physician to Guy's Hospital, and late Lecturer on Mental Diseases.

A GOOD deal of mental unsoundness exists that has no right to be considered insanity. The Commissioners in Lunacy have maintained, and still do maintain even to the bitter legal end, that lunacy and unsoundness of mind are equivalent terms; and you, as general practitioners, in signing a certificate, have to say that the person under consideration is a person of unsound mind—that is, a lunatic. From this arise three considerations. First, from the medical point of view, what do we mean by insanity? Unsoundness of mind is the dictionary equivalent, but from the legal point of view this is an error; for in law it is a question as to whether a man understands the nature and quality of his acts. The legal question is one of responsibility. Society, on the other hand, inquires whether the person is dangerous to himself or others; if so, then he ought to be shut up. Some of the popular papers, and even papers of good repute, consider that a man may be in a very bad mental state, but unless he is dangerous to himself or to others he should not be locked up.

Twelve months ago a man was shut up in an asylum on the usual lunacy certificates. He demanded that his insanity should be inquired into by a jury. The trial cost thousands of pounds, and in the result the jury found that he was a person of unsound mind, and he was so adjudged. Those of the public Press immediately took up the matter. They said, "Here is a man of unsound mind, who has certain vague ideas as to clothing, ventilation, and other eccentric notions about his singing and his vocal powers. Why should he—an otherwise harmless creature—be shut up simply on the dictum of one or two specialists?" The newspapers maintained that such a man, though of unsound mind, need not be locked up.

There is unsoundness of mind that need not be treated as insanity; there are many epileptics who "have bees in their bonnets" who need not nevertheless be sent to an asylum, and it is to such people I wish to refer to-day. I have said over and over again that no absolute rule can be laid down, for insanity is purely a relative term. There is no micro-organism of insanity. There is no insane bacillus, nothing specific that is going to make a definite change in the nervous system, or produce a definite alteration of conduct. The brain has only got a certain number of ways of expressing its maladies. Brain decay, or brain poisoning, or simple inharmonious working—each may produce similar symptoms in some cases.

Whether the symptoms are to be treated as insanity or not depends, to quote another axiom of mine, upon the length of the purse. If a wealthy man is eccentric it does not matter. Should he

prefer to have his breakfast at midnight he can have a night staff instead of a day staff to look after him. But the same conduct in another man who ought to be earning his living, or who has no servants to look after him, will have a different practical significance. Though the mental condition is the same, the cost of private care in the latter instance is out of relationship to the man's means, and society therefore interferes.

It is possible you may be called to see people who are either mad or delirious. A favourite axiom of mine is, never certify an alcoholic as "lunatic"; that is, avoid certifying a man suffering from delirium tremens. The only medico-legal regrets I have reason to feel in regard to my profession have been in connection with "alcoholics." To the alcoholic "all things are possible," and however bad the mental symptoms may be, the whole may clear off, and apparent recovery occur. A person does not fully recover until he recognises his malady, and the persistent alcoholic never does this.

Then there are many instances of people who suffer from forms of delirium associated with specific fevers such as typhoid—people who have malarial troubles and who have taken a certain amount of liquor and got run down and passed into a chronic delirious condition. In such cases be cautious in deciding whether the patient is delirious or mad. Some persons who have suffered from repeated attacks of delirium may pass into a state of chronic hallucinations in which they seem to lead a double life. So that if left alone they are busy talking to the "invisibles," while at the same time they may be recalled to the work-a-day world. Some such are mad enough, but do not necessarily need seclusion. Some mental disorders depend directly on the condition of other functions. Thus I saw lately a young fellow who had suffered from malaria in Central Africa. When I saw him he had the wildest and most general exaltation of ideas, and was wishing to start the most extravagant business. This was associated with a pulse of 120 without rise of temperature. Rest in bed and suitable tonics reduced his pulse to normal and his mind to sanity, but a too early return to work caused a relapse with similar pulse-rate and with the old extravagance. In the end rest cured him. This form of mental disorder was entirely dependent upon the physical conditions. Delusions with exaltations may be also associated with diabetes and phthisis. In such cases the mental symptoms may mask the physical condition entirely. I have had occasion, in consultation in a case of melancholia and refusal to eat, to ask a medical man in attendance to examine the urine. It was loaded with sugar, showing that the

melancholia and the refusal to eat were due to diab tes that had not been recognised. Such mistakes are injurious to the practitioner, as persons resent having to take their relatives to "mad doctors" when they are only suffering from physical disease. Kidney disease is also a factor in slight mental disorders. These are all practical points, and one has to ask how many of these cases are "insanity." The unsoundness of mind is not due primarily to brain disease in these cases, and what the practitioner has to do is to consider and treat the bodily disease rather than the mental condition.

There is such a thing as defect of brain that cannot be called insanity. Every week I see weak-minded giants sixteen or seventeen years of age, six feet, or even more, in height. They can not be treated as lunatics, and yet there is the defective mind. They are defective in control, and very often indolent and totally unable to apply themselves to work. They have no delusions and no hallucinations, and yet they are useless logs, and give rise to a great deal of trouble.

I saw yesterday a young fellow who had been rather brilliant at one of the universities. Although a steady fellow living in college and not unhealthy-minded, occasionally playing football and golf, he was one who absolutely could not learn. He was well brought up and well educated. He said to me, "*I cannot learn*"; nor can he at present. There is no insanity about the lad, though his memory is gone. There is an abnormal condition of the brain, but it is not insanity. I have known many brilliant fellows who fail like this, who develop sleeplessness and begin with morphine, which soon finishes them. You recognise this in adolescents who outgrow their strength; they are incapable of control and require rest. Any attempt at restraint gives rise to the most violent outbreak of rage, during which all sorts of things may be destroyed. This is a peculiar nervous disorder, but may not amount to insanity, and is called hysterical. Yet if the youth takes a "header" out of the window the coroner's jury will be sure to ascribe the occurrence to temporary insanity, and you will be blamed. Some forms of vicious self-indulgence may indicate mental disorder, which is not necessarily insanity. Regarding the occasions on which these disorders result in offences against society I used to be ready and willing, as part of my professional duty, to defend people who were weak in mind in this direction; but I came to the conclusion that, as Maudsley said of them, there was some madness and some badness, but often more badness than madness. If they were more bad than mad I did not like to have anything to do with them. Sometimes when elderly men get punished for these offences in many cases the condition will not be accepted as insanity by lawyers, as the man knows what he is doing.

Speaking of moral faults, kleptomania is a common one. Children begin by thinking that their parents belong to them, and not they to their parents. They think that the whole world belongs to them. Some children never can be taught that everything they can touch, reach, and move does not

necessarily belong to them. There are people who never get beyond this infantile stage. Certain others—women at the climacteric period, for example—are most frequently given to this stealing, and in a very great number of cases they steal perfectly useless things; yet they know they are doing wrong, and you have the greatest difficulty in persuading juries that such unsound persons ought not to be punished. Social crimes of the sexual type and the indecent type are examples of cases on the borderline of mental disorder without actual insanity.

Then there is another type known as social misfits; and some of these are equally difficult to deal with, because there is so little to go upon. I was asked by a lady whether I would mind calling to see her husband. She complained that he neglected her, was not sober, and treated her badly in many ways. He had been a good husband for a quarter of a century, and she was quite sure that he was going out of his mind. Some weeks afterwards a gentleman came to me, saying that he was very anxious about his wife. He said she had lost her affection, was not sober, and had completely changed in her ways. I told him that I had already seen her, and that she was asking the same questions about himself. I have no doubt that the one who consulted me first was the nearer to insanity. The last trial that Lord St. Helier had before him was one in which a specialist had been consulted by both husband and wife about their respective insanities. In very many of these cases the weakness is associated with the climacteric change—a change so complete, bodily and mentally, that she sees everything wrong and gets into a state of uncertainty and "wobble."

Again, there may be over-growth of a certain tendency. An educated man, coming from a very neurotic stock, suddenly loses his self-control, and sends libellous postcards to his relations and to others. He can control himself sufficiently at times, but periodically he is not responsible, yet not insane. In such a case society steps in and says that if such acts are not physically dangerous they are morally dangerous, and therefore such a person should be shut up, and I am not disinclined to act along that line in some cases. A great deal of mental disorder that cannot be treated as insanity is hysterical—a loss of control, almost resembling mania. I recall one case admitted to Bethlem Hospital—fanciful, hysterical, and paraplegic. When the paraplegia disappeared she became slightly maniacal. She left the hospital still hysterical, still paraplegic, though there was improvement in both conditions. In such conditions one meets with false accusations. These conditions are improved by an interval of isolation, after which the patient will admit that there is not a word of truth whatever in the accusations. A man was admitted into Bethlem Hospital in consequence of threats to murder his wife, whom he accused of adultery. He appeared to recover, but said the accusation was well founded and true, but he would separate from her and live with his married son. Later he came to tell me that the whole was a delusion, and that his wife was as honest as possible. Yet there was a time when he appeared sane in conduct, but

had a fixed false idea. There may be the greatest difficulty in determining what is sanity and what is insanity; in fact, what is the truth. It is not a very unusual thing to hear of such accusations being made against the doctor or the husband, and many have been brought before me. I was once asked to see a young lady who was at one of the universities. One Sunday morning when the students were going to chapel she gave them the slip and walked to London. Her parents received a telegram from the authorities: "Your daughter has disappeared. We do not know what has become of her." When she arrived home she seemed confused, and alleged that when she was a mile or two out of town she received the inspiration that she was to be the virgin-mother of the second Christ, and she was met by a tramp, to whom she told the tale. He said, "Well, then, I will be the father." She was put to bed and carefully nursed, and in a few months she got quite well, there being no truth in the tramp story. Here was a case of mental unsoundness undoubtedly, and yet there would be great difficulty in treating it as insanity.

Cases of self-injury also belong to this group. A girl consulted a dermatologist about a peculiar worm which she said was appearing on her skin. She had a peculiar mark on different parts of her body, but always within the reach of her right hand. She had been applying liquor potassæ.

One of the disorders which have sometimes to be treated as insanity is loss of recent memory associated with symptoms of alcoholism. Of the two most typical cases I have had to deal with, one was an English peer who had a good many attacks of delirium tremens, and at last passed into a condition of complete loss of recent memory, so that from moment to moment he did not remember what he had said or what was passing, and yet he was agreeable company to spend a day or two with. When I asked who is the Prime Minister or even Queen he would not know. Here was a man absolutely defective in recent memory, and yet with perfect memory of who and what he was. When it was suggested that he should be served with a notice that the Court of Chancery would conduct his affairs I declined to allow him to be considered a lunatic. On the other hand, a woman suffering similarly, belonging to the lower middle class, had to be sent to the asylum because she had no one to look after her and protect her.

Conditions of mental defect which scarcely amount to insanity constantly arise. They may depend upon alcohol, illness, or senility. With senility you may get dementia so advanced that the man is totally unfit to manage himself or his affairs, or you may get simple placid dementia in which the man is not capable of managing his affairs, but can look after himself fairly well. Senile troubles may show as (1) indecent exposure, obscenity and things of that kind. In such cases the French law regards senility as mitigating responsibility. (2) But you may get hallucinations with senility, and in such cases I admit it is extremely difficult to know when to treat cases of this kind as insane, and when to treat them as not requiring certification or detention. Thus

a man may have marked hallucinations of sight with signs of senility, but otherwise he may be as clear mentally as possible. This may lead to very serious trouble. If such a man imagined he saw burglars in his house and fired out of his windows and killed someone, should he be tried as a criminal or as a lunatic?

There may be disorders of the nervous system which interfere seriously with the social well-being, and yet they can hardly be treated as insanity. (3) With age and physical weakness come also sometimes suspicion, inquisitiveness, and mental uncertainty. The persons cannot make up their minds to do anything, not even to leave a room without asking whether there is another door. That need not be treated as insanity in the well-to-do, but it is different if a man has to earn his living.

One recognises a great deal of mental disturbance which may lead to insanity, but should not always or necessarily be treated as insanity and certified. It is pretty certain that we are very near the time when there will be a considerable relaxation in lunacy legislation in this direction. It will be a more reasonable legislation. At present the lunacy certificate says that unsound mind and lunacy are equivalent. They are not equivalent, and I want you to recognise that.

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"Some Summer Resorts in the South of France." By John W. Potter, F.R.G.S.

H. KIMPTON.

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GONORRHOEAL ARTHRITIS: ITS DIAGNOSIS AND TREATMENT.

GONORRHOEAL ARTHRITIS occurs in many different degrees of severity. It may appear as an acute or sub-acute affection of one or of many joints; or as chronic pain, stiffness, and inflammatory thickening. Occasionally cases of passive effusion occur, most commonly in the knees, ankles, and shoulders. Perhaps the most serious cases are those in which many joints are affected and there is an acute or sub-acute febrile attack, for here the condition may be mistaken for rheumatic fever.

SOME POINTS IN THE DIAGNOSIS.

Suspicion should always be aroused when joints outside the usual incidence of rheumatism—for example, the temporo-maxillary, sterno-clavicular, or sacro-iliac joints—are involved. Inflammation and thickening outside the capsule of the joint, œdema of the subcutaneous tissues, and thickening and tenderness of the bones, as if from periostitis, should also suggest a gonococcal origin. Again, if local symptoms and fever persist or recur in spite of the administration of salicylates, doubt of the "rheumatic" nature of the attack may well arise, and obviously in all doubtful cases it is wise to make certain by investigation directed to the discovery of a urethral or vaginal discharge. Even then there are opportunities for error.

ITS ONSET.

Gonorrhœal arthritis rarely develops until some weeks after the primary affection, and it may not appear for months. Hence the original gonorrhœal discharge may in the male have been reduced to a slight "gleet," and even in the female there may be no conclusive evidence of a specific vaginitis in the urethra or in the vagina; such evidence, however, may be found in the glands of Bartholin and in the canal of the cervix uteri. Thus it is a sound rule of practice that what seems to be "rheumatism" may really be an arthritis following gonorrhœa. With this rule clearly before him the practitioner will be saved from many serious blunders.

THE TREATMENT.

The first aim of treatment is to cure the gonorrhœa, on which the whole train of subsequent symptoms depends. So long as there is permitted further opportunity for absorption of the poison, so long will joint conditions persist. Almost every practitioner has his own favourite remedy for the local treatment of gonorrhœa, and it may be surmised that the secret of success depends less on the specific virtues of the remedy than on the thoroughness of its application. The writer of this note prefers either potassium permanganate (1 in 1,000) or zinc chloride (1 grain to the ounce), and the frequency of application is determined by the abundance of the discharge. Always before injecting the prescribed solution a quantity of warm water

should be used to cleanse the mucous membrane, and thus to permit the remedial agent to come into contact with the site of the mischief; the necessity for this procedure is especially urgent in the case of women. A second demand in the treatment of gonorrhœal arthritis is maintenance of the patient's general health and vigour. Here is one of the reasons why an erroneous diagnosis of rheumatism may carry such serious consequences. For the restricted diet which, wisely or unwisely, is often ordered in cases of rheumatism is most unsuitable for the subjects of gonorrhœal arthritis. These patients are depressed both mentally and physically, and an important element in conquering the disease is the restoration of the general health. Probably quinine with potassium bicarbonate and citrate, all in full doses, is the best medicinal agent so long as there is much fever. But when the temperature is normal or approximately normal the quinine may be seconded by such tonics as cod-liver oil, hypophosphites and strychnine, and a generous dietary should be permitted.

A THIRD POINT.

The third principle of treatment which demands recognition is fixation of the affected joints, if necessary under a general anæsthetic. This may be combined with moderate pressure, and should be interrupted at frequent intervals by passive movement with a view to prevent stiffening of the joints. Light splints and bandages, and even indiarubber bandages, may be used for these purposes, but some prefer plaster of Paris. In any event careful padding of the joints should be adopted, as there is usually much muscular wasting, and this, together with the local tenderness, make adequate protection from excessive pressure of great moment. As the joint conditions improve massage, passive movements, exercises, and electricity may help to restore strength and freedom of movement. The same is true of hot air and electric light baths, and indeed these have a field of utility even when the arthritis is still active. Puncture or incision of a joint are rarely needed in gonorrhœal arthritis; nor is it usually necessary to incise the integument in cases where there is inflammatory swelling of the subcutaneous tissue in the neighbourhood of the joint—a condition, by the way, that is sometimes mistaken for cellulitis.

THE USE OF SERUM.

Lastly must be mentioned the use of anti-streptococcic serum. Probably the toxins absorbed in gonorrhœa are not merely those of the gonococcus, but also of various other organisms. At all events it is a fact that the injection of a polyvalent anti-streptococcic serum has produced much benefit in acute and sub-acute cases. A dose of 20 cubic centimetres may be given and followed by 10 c.c. daily for three or four days. In very severe and urgent cases two doses may be given daily. Dr. Soltau Fenwick and Dr. Porter Parkinson report decidedly encouraging results.

CLINICAL POINTS.

THE WIDAL TEST IN GENERAL PRACTICE.

THE Widal test* is probably the most certain single test we know of for the confirmation of a diagnosis of typhoid fever. It depends upon the fact that, during the course of the illness, the patient develops substances in his blood-serum which have a peculiar action upon any typhoid bacilli which may be mixed with the serum. The nature of this action is uncertain, but its effect is well known; the substances produced in the serum are called agglutinins, and they seem to make the surface of the typhoid bacilli sticky, so that instead of being evenly distributed through the fluid in which they are suspended, they begin to stick together in clumps, or, as it is termed, to agglutinate. When blood is obtained from the patient in the well-known glass pipette, and sent to the laboratory, the serum is separated from the clot and then diluted with normal saline solution. This dilution is readily carried out upon a cover glass. For example, if a mixture is required in which typhoid bacilli are to be suspended in serum diluted 200 times, the method would be as follows: With a platinum-wire loop, one loopful of the serum would be placed upon a cover glass; nine separate loopfuls of solution would be placed in nine separate little heaps upon the same cover glass, and then the whole mixed up together by means of the platinum wire. One loopful of this mixture would then be transferred to a second cover glass, followed by nine loopfuls of solution as before. One loopful of this would be transferred to a third cover glass, and to it would be added one loopful of a broth culture of typhoid bacilli. The result would be a mixture of typhoid bacilli in serum diluted 1 in 200. The cover glass is then inverted over a ring on a slide and the "hanging-drop" preparation watched under the microscope. It is examined at once, to be sure that every thing is all right; and again in half an hour's time. If the bacilli remain as evenly distributed as they were to begin with, the reaction is negative; if, on the other hand, they have run together into masses or clumps, the reaction is positive and the diagnosis of typhoid fever is confirmed unless the patient has had typhoid fever before. A complete positive Widal's test is, therefore, agglutination of the bacilli within half an hour when mixed with serum diluted 1 in 200. As a rule less dilutions of the serum are tested at the same time—for example, 1 in 20 and 1 in 50. If no clumping occurs even in 1 in 20 dilution, the patient almost certainly has no typhoid fever; if the clumping occurs in 1 in 20 and 1 in 50, but not in 1 in 200, the reaction is partial; and in partial cases it is usual to repeat the test in a few days, when, if the condition is typhoid fever, the reaction will usually be found to have become complete. It takes a certain length of time for the patient to develop the agglutinins in his blood; that is to say, the fever must have existed for a certain length

of time before the Widal test will be positive. The reaction is seldom complete before the end of the first week, and more often than not there is only a partial reaction at that time, the full agglutinative power of the serum being reached towards the end of the second week.

If the above definition of a positive Widal's test be adhered to, nothing else but typhoid fever, past or present, will give it; so that a positive reaction obtained by a skilled person leaves one with no doubt as to the typhoid fever. Partial reactions, on the other hand, may be obtained in other febrile processes, such as fungating endocarditis, so that when the standard dilution is taken to be 1 in 50, as is the case in some laboratories, there is a certain amount of uncertainty as to the meaning of the result.

The phenomenon of agglutination is not restricted to typhoid fever; the serum of patients with Malta fever will cause clumping of cultures of the micrococcus melitensis; that of patients with specific gastro-enteritis will cause clumping of Gaertner's bacilli; some forms of dysentery lead to the formation of agglutinins for bacillus dysenteriae; and it is noteworthy that the agglutinins are specific—that is to say, the serum of typhoid fever patients, though clumping bacillus typhosus, will not clump micrococcus melitensis; and so on for each disease and organism.

It has been sometimes thought that the clumping had something to do with the motility of the typhoid bacilli; this is by no means the case; the agglutination depends upon some purely physical cause, independent not only of the motility, but even of the life of the bacilli; in other words, *Widal's test can be performed with dead cultures of bacillus typhosus*; and it can be done in test tubes without any microscope being needed. Widal, in his original method, used test tubes. It is true that the hanging-drop method, with observations under the microscope, is somewhat better and more certain than the test tube method; but it is of considerable value to the general practitioner to know that he can easily perform the Widal test himself, using a dead culture from which there is no danger of inoculating himself or others with typhoid fever. The outfit required can be purchased all ready for use, for a few shillings; it will keep, and enough material for performing 30 Widal tests can be obtained at a time. The outfit contains a sterile suspension of dead typhoid bacilli; a series of four small test tubes marked "50," "100," "200," and "control"; a tube for collecting the blood, another for diluting the serum, a small pipette for measuring it, and a larger pipette for checking off the required quantity of sterile suspension of bacilli. To use the apparatus, the lobe of the patient's ear is pricked in the same manner as for making a blood count; about 10 drops of blood are collected in the blood tube, and the latter is corked. This is all that need be done at

* Called after the name of its discoverer.

the bedside; the doctor can carry the blood away with him, and do the rest of the test at home. When the serum has separated from the clot, which it will have done in an hour or two, a single drop of it is transferred to the diluting tube, and nine drops of normal saline solution are added to it. Normal saline is water to which salt has been added in the proportion of a full drachm of salt to each pint of water. The actual amount of serum put into the diluting tube does not matter provided exactly nine times as much normal saline as serum is used; and to be accurate in the dilution the small pipette is of service. If the diluted serum is cloudy, it will clear if it be allowed to stand for a few minutes. Meanwhile 20 drops (or at least 20 of the same units as those used in measuring off the serum) of the sterile suspension of typhoid bacilli are measured off into each of the special test tubes, and four drops (or units) of the diluted serum are added to the tube marked 50, two drops or units of the diluted serum to the tube marked 100, and one unit to that marked 200. The same number of typhoid bacilli

are present in all the tubes; the serum dilution in the first is 1 in 50; in the second, 1 in 100; in the third, 1 in 200; in the fourth there is no serum, so that it can serve as a control, and for purposes of comparison. The tubes are now corked, well shaken, and allowed to stand in not too cold a place. The reaction consists in the appearance of flocculi, which gradually increase in size and settle to the bottom of the tube. If in about six hours the flocculi have formed and begin to settle to the bottom of the 1 in 200 tube, the reaction is strongly positive; if they have done so in the 1 in 50 and 1 in 100 tubes, but not in the 1 in 200, the reaction is partial; if, on the other hand, the fluid in all the tubes remains uniformly cloudy like that in the control tube to which no serum has been added, the reaction is quite negative.

In all probability the busy practitioner will prefer to send the few drops of blood to the laboratory for examination; but in some cases he may be very glad to know that there is an easy way of his doing the test himself.

POINTS IN TREATMENT.

THE PINK COLOUR OF ADRENALIN SOLUTIONS.

ADRENALIN solution is often an emergency medicine. It is essential, therefore, that it should be at hand ready for use; there is seldom time to send to the chemist's for a fresh sample of it when it is required in such conditions, and yet the interval between the purchase of a stock of it and the moment when it may be urgently required may be a long one. The question at once arises, How long will adrenalin solution remain potent.

The answer is that unless precautions are taken in the making of the solution it will deteriorate comparatively soon. Every medical man is familiar with the pink colour that appears in the previously colourless solution when it has been kept a little while; the development of the pink colour occurs even in stoppered bottles; and if the solution is in a bottle which is not tightly corked the pink will pass on into a deep brown. If adrenalin be added to warm distilled water and then shaken well and exposed to the air, the development of the colours—first pink and then brown—can be watched. It is sometimes stated that a solution of adrenalin which has become pink is still efficacious in its action; but it seems certain that it has deteriorated, apparently from oxidation of more or less of the adrenalin. This deterioration does not occur if the bottle of solution is quite full and is well stoppered; but once the bottle has been opened, and some of the solution used, the rest is almost certain to deteriorate, even if the stopper is firmly replaced, unless appropriate measures are adopted in preparing the solution. The best method of keeping the solution is to make it up with a very small quantity of sulphurous acid; this acid is also used in preserving eserine sulphate solutions in eye work, and the amount required is so small that it does not contraindicate the use of the fluids in ophthalmic practice. Mr. Horace Finne-

more, Pharmacist to Guy's Hospital, advises that the prescription should be as follows:—

| | | | |
|--------------------------------|-----|--------|------------|
| Adrenalin | ... | ... | 0.10 parts |
| Chlor-butyl alcohol | ... | ... | 0.50 " |
| Sodium chloride | ... | ... | 0.90 " |
| Diluted hydrochloric acid | ... | ... | 0.25 " |
| Sulphurous acid | ... | ... | 0.25 " |
| Distilled water, to make up to | ... | 100.00 | " |

The distilled water should be sterilised by boiling, and then allowed to cool; when nearly cold, the chlor-butyl alcohol and the sodium chloride should be added; the former of these is only soluble in cold water to the extent of 1 part in 200, so that the above will be a saturated solution; if any of the chlor-butyl alcohol crystals remain undissolved they should be filtered off from the final solution; it is to ensure that as many as possible of the crystals shall be dissolved that they are added whilst the distilled water is still tepid. When it is quite cold the diluted hydrochloric acid, the sulphurous acid, and the adrenalin are added to 25 parts of the liquid, and when these are dissolved the rest of the liquid is added and made up with sterilised, but cold, distilled water to 100 parts. The solution seems to keep well. The object of putting in each of the ingredients is as follows:—

The adrenalin, in order to make a 1 in 1,000 solution of the active principle.

The chlor-butyl alcohol because of its local anæsthetic properties.

The sodium chloride in order to make the liquid isotonic with the blood; that is to say, equivalent to "normal saline" solution.

The hydrochloric acid to convert the adrenalin into the more stable adrenalin chloride.

The sulphurous acid to prevent disintegration of the adrenalin chloride and formation of the pink colour on keeping the solution in stock.

POINTS IN SURGERY.

SALIVARY CALCULUS.

SALIVARY calculus occurs most commonly in the submaxillary gland. The numerous simple glands which are distributed throughout the buccal mucosa are also apt to become plugged by little white particles which may be regarded as minute calculi. The sublingual is not often affected; the parotid practically immune. This immunity is to be attributed to the nature of the parotid secretion, and perhaps also to the position of the orifice of its duct, which is placed unfavourably for the entrance of foreign substances.

CAUSES OF SALIVARY CALCULUS.

Often a foreign body, for example the bristle of a tooth-brush, forms the nucleus of a concretion, and may be regarded as the source of the trouble. In other cases no such nucleus is discovered; to explain these, acidity of the saliva has been suggested, and cases have been recorded where salivary calculus has been said to be associated with acidity of the saliva. This has not been the writer's experience. But there is a simple fallacy in testing the reaction of the saliva; for it will turn blue litmus red and red litmus blue. If only blue litmus paper be used, the result may lead the observer to the erroneous belief that the saliva is acid. However, it seems reasonable to suppose that the local production of acidity in the submaxillary duct, such as might occur through the action of micro-organisms, would lead to the deposition of a concretion from the mucous-laden secretion of the gland.

Turning to the practical side of the matter, the simple buccal glands may be dismissed in a few words. They may be compared with the sebaceous glands of the skin. Just as the duct of a sebaceous gland may become blocked and a sebaceous cyst be formed, so may the duct of a simple salivary gland become blocked and a salivary cyst be produced. On the lips and cheek such cysts do not attain large size, probably because they become ruptured by the teeth; but in the floor of the mouth they may attain a diameter of one inch. The treatment of these simple salivary cysts is to apply a local anæsthetic to the overlying mucous membrane, and snip away a portion of this with scissors.

SUBMAXILLARY CALCULUS.

The symptoms of submaxillary calculus are due to blocking of Wharton's duct. Usually the patient will give a history of a submaxillary swelling, which gets larger and more tender during and after meals, and diminishes in size or perhaps disappears entirely before the next meal. Sometimes he will complain that he can feel something wrong in the floor of the mouth, underneath the tongue. Inspection of the floor of the mouth may reveal some abnormality of the papilla and orifice of the duct, which are situated near

the frænum of the tongue. Often the mouth of the duct is occupied by a small plug of putty-like material; and the papilla in which the duct terminates may be swollen, so that instead of being flaccid and indistinct like its fellow on the healthy side, it stands up rigid and prominent. Sometimes there is petechial hæmorrhage in the papilla. Palpation, by means of one finger in the mouth and a finger of the other hand beneath the jaw, may reveal a calculus lying in the duct, and close beneath the mucous membrane; and occasionally, but not often, pressure in this region will cause pus to exude from the duct. On the other hand, the calculus may be situated deep in the gland, so that it cannot be felt by palpation. In such a case a probe may be passed along the duct in the following manner, and the calculus felt. The mucous membrane over and around the papilla is swabbed with a 5 per cent. solution of cocaine. When this has taken effect, the papilla is steadied with a pair of conjunctival fixation forceps, and a fine sterilised lachrymal probe is inserted and gently passed backwards along the duct. But the patient's history, together with inspection of the papilla and palpation of the floor of the mouth, as a rule will yield all the information that is required, and, apart from the discomfort caused to the patient, the passage of a probe may fail to detect a calculus, even when one is present, and it is further open to the objection that by its introduction sepsis may be started. This is an important point, for a gland whose duct is blocked by a calculus is prone to suppurate. In untreated cases, one of two events may come about. Either the gland will in time cease to secrete and become converted into an indurated mass, a spontaneous cure being the result, or suppuration may ensue. And suppuration in the submaxillary region, especially if its cause be unrecognised and the calculus be allowed to remain, is apt to have unhappy results, which it will not be necessary to consider in detail.

TREATMENT.

If the calculus be in the duct and close under the mucous membrane, it may be removed under cocaine anæsthesia, through an incision of the overlying buccal mucosa—an operation which is not always so painless as it sounds. But if suppuration has occurred in the gland, or if the calculus is too deeply situated for removal through the mouth, an external wound is necessary. In the presence of an abscess it will be necessary merely to open the abscess, insert a finger in order to find and remove the calculus, and then to effect drainage. In cases which are not septic the indurated submaxillary gland had better be dissected out entire with its contained calculus. That is effected most easily by a curved incision below the jaw, something similar to the text-book incision for ligature of the lingual artery. A large vein—the temporo-facial—will be divided; otherwise there are no especial difficulties in the operation.

THERAPEUTICS.

REMEDIES AND THEIR USES.

The Newer Iodine Compounds.

EVER since the introduction of the iodides various attempts have been made to overcome the untoward results which occasionally attend their administration. Iodism, with all its attendant disagreeable symptoms, is often dreaded by the physician who prescribes the iodides to a patient for the first time. By adding ammonia in the form of the carbonate, or by introducing spt. ammon. arom. into the mixture, iodism may to a large extent be prevented, although it can hardly be avoided altogether. Sometimes by increasing the dose of the iodide the symptoms, curiously enough, disappear. In view of all this, several new iodine compounds have been prepared within recent years, and for all of these it is claimed that they are less liable to derange the stomach and to produce iodism than the ordinary iodides of the Pharmacopœia.

Iodipin.—This was first brought before the notice of the profession in 1898. It is a chemical combination of iodine and sesame oil. It is prepared in two strengths. Ten per cent. iodipin contains 10 per cent. of iodine, and 25 per cent. iodipin contains 25 per cent. of iodine. The first is a bright yellow, oily liquid, resembling closely sesame oil in odour and taste, whereas the 25 per cent. strength is an oily, viscous fluid which at low temperatures becomes thick, and almost like treacle. The weaker solution is intended for oral administration, the stronger one is almost solely used subcutaneously. Iodipin is only disintegrated in the intestinal canal, and its absorption takes place entirely from the intestines. The greater portion of iodipin when taken is at once oxidised, and on its oxidation all the iodine separates out as iodide. Excretion is much slower than in the case of the ordinary iodides. Toxic symptoms are less marked, owing to the slow oxidation and protracted elimination of the drug. Symptoms of gastro-intestinal irritation are practically never experienced.

Therapeutic Applications.—The indications for the use of iodipin are the same as for the iodides. Thus it finds its chief employment in cases of tertiary syphilis. In such cases the subcutaneous administration is worthy of trial, as by this means we have a continuous liberation of iodine going on, and also we secure that in the oxidation of iodipin the iodine is set free in a nascent state. From the site of injection the iodipin is absorbed very slowly, but is distributed gradually through the system. In this way small quantities of the drug are brought constantly into the circulation. The iodipin should first of all be warmed to the body temperature, so as to render it more limpid. The syringe employed should possess a capacity of at least 10 c.c., and should have a needle of somewhat wide calibre. The injections may be made in the upper arm, between the scapulæ, or in the gluteal region. No evil results ever follow the hypodermic use of iodipin. In most cases 20 c.c. of the 25 per cent. strength may be injected daily. These injections are well tolerated,

occasion little or no iodism, and produce a prompt and markedly beneficial effect.

Another class of cases which may be benefited by the administration of iodipin is that of circulatory derangements, such as arterio-sclerosis and aneurism. Here we may give by the mouth from a half to 1 drachm of 10 per cent. iodipin thrice daily, increasing the dose gradually if desired. It is best given in warm milk, or, if preferred, may be administered in gelatine capsules. Then, again, iodipin is of great service in chronic respiratory diseases, such as chronic bronchitis, asthma, pulmonary fibrosis, and emphysema; but it should be given with great care in cases of pulmonary tuberculosis. It has also proved beneficial in chronic rheumatism and other rheumatic affections, such as sciatica. In diseases of the nervous system, such as locomotor ataxy and peripheral neuritis, we have seen good results follow its persistent use. No doubt other uses will suggest themselves, but the conditions already mentioned are those in which we have obtained definite results.

Sajodin.—More recently still, Fischer and v. Mering have discovered a further group of iodine compounds which are very readily absorbed, effectively digested, and free from taste. Of these sajodin is the most valuable. It is the calcium salt of a compound iodo-acid. It is, unlike iodipin, in the form of a powder, which is stated to contain 26 per cent. of iodine and 4.1 per cent. of calcium. It is completely insoluble in water. Its uses are similar to those of iodipin. It is of special value in the tertiary manifestations of syphilis, and more particularly in cases presenting gummata in various localities and in affections of the bones. In chronic pulmonary and bronchial diseases, as well as in arterio-sclerosis and aneurism, sajodin is worthy of careful and extended trial.

Dose and Mode of Administration.—The initial dose for adults is 10 grains, thrice daily after meals. This may be increased, just like iodide of sodium or potassium, up to 60 or more grains. It is best given dry on the tongue or in wafer paper, and a small glassful of water taken immediately afterwards. It should never be given in the form of compressed tablets. Its tastelessness and freedom from odour make sajodin very acceptable to fastidious patients who cannot take iodipin on account of its distinctly oily taste.

Our experience with iodipin and sajodin proves them to be greatly superior to the iodides in common use. It cannot be said that they do not produce symptoms of iodism, for they undoubtedly do, even when given in small doses well diluted; but the symptoms are never so marked as when the iodide of sodium or of potassium is administered. The special value of iodipin lies in the fact that it may be given hypodermically—a matter of considerable importance when we wish the patient, as, for instance, in aneurism, to be brought rapidly under the influence of the drug.

DISEASES OF CHILDREN.

ON THE CAUSE AND BETTER TREATMENT OF RICKETS.

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In common with a number of other diseases, rickets has a well-known pathology, and a cure whose main lines are generally accepted, but a cause which continues to elude exact identification. It may be argued that under these circumstances the cause commands no more than an academic interest; but hardly with justice, for lack of particular knowledge on the subject makes treatment random, even if it be effectual, and slower in its operation, one may suspect, than would be the case did we know for certain the precise fault which calls for remedy. I propose to submit a few considerations, based upon clinical experience, which appear to me both to narrow the debatable issues of the matter and to indicate more direct avenues for successful treatment than those habitually followed at the present time.

CAUSATIVE FACTORS.

The causes of rickets, as given in the most recent text-books, are these. Generally unhygienic conditions of life, in particular lack of light and air, associated with a diet rich in carbo-hydrates, but poor in fats and proteids. Defined more strictly this proposition admits of the following interpretations, or combinations of these influences. Rickets (assuming the predisposing causes) depends upon (a) deficiency of (1) fats, (2) proteids, or in the alternative, (b) excess of carbo-hydrates, particularly starches, fats, and proteids being sufficiently ample. As regards the effect upon the growing organism of an absolute deficiency of fats, there is experimental evidence that young pigs fed upon milk from which practically all fat has been removed do not become rickety, although they become very thin.¹ Similarly, that mere lack of proteids is insufficient to produce rickets seems to be demonstrated by the fact that young children may die from slow starvation, either as a result of neglect, or of gastro-intestinal disorders, without evincing signs of rickets. We must give a more detailed consideration to the third alternative, namely, that rickets is due to an excess of carbo-hydrates, the other food elements being present in quantities sufficient to preserve health apart from such excess.

The commonest victims of rickets are children of the poor in the second and third years of life. From inquiries made at the East London Hospital for Children it appears that the standard dietary for children at this age and in this rank of life has some such basis as follows, subject of course to incidental variation from time to time. *Breakfast*: Bread and butter, or bread and dripping, with weak tea. *Dinner*: Bread and butter, or bread and dripping, pudding, either suet pudding or, less often, "milky pudding" of rice or sago. (The British matron affects suet pudding, the Jewish matron sago. I have not observed any notable predominance of rickets in either community at these later ages,

although during the first year of life Jewish children seldom suffer from rickets. This is due to the almost universal custom of breast-feeding among the Jews.) *Tea*: Bread and butter or bread and dripping. Milk holds a very subordinate position, and most mothers of this class consider meat to be an improper article of consumption for young children, though fat bacon is often given.

ERRORS OF DIET.

The above dietary was lately recounted to me by the mother of a fat though dwarfed and rickety boy of four years, and is typical of many. Reviewing in the light of it the possibilities of fault already detailed it would appear that, monotony notwithstanding, such a bill of fare contains in ample quantity all the necessary elements of diet. Nor can it be said that co-existing errors of assimilation stultify the supply, for, common as are gastro-intestinal disturbances among rickety children, the disease is quite often met with in subjects who show no signs of digestive disorder, and who, judged by ordinary standards, assimilate well. It seems that of our possibilities the one which is certainly fulfilled is (b), that, namely, which asserts that rickets is due, not to an absolute deficiency in any element of diet, but to an excess of carbo-hydrate. This I believe to be the true explanation of rickets: that it is due to the disproportionate stimulation; by an excess of carbo-hydrates, of certain items of development, and represents an uneven advance of the line of growth. Vague as these words are, I cannot better them at present.

This view is strongly supported by such a case as the following: A child of well-to-do and careful parents came under my notice at the age of 18 months for the reason that no teeth had yet been erupted. He was fat but rather anæmic, and presented well-marked evidences of rickets in beaded ribs and enlarged epiphyses. I was credibly assured by his mother that he had consumed approximately two pints of cow's milk, obtained from a good dairy, daily for months past, but had in addition eaten largely—for he had a good appetite—of bread and butter, and of rice and other "milky puddings." It is incredible to me that this child had received an insufficiency of any of the elements of a healthy dietary, and there was nothing about him to suggest a faulty assimilation of food in general. But he certainly had eaten much farinaceous material. Within two months of the institution of a practically starchless diet the teeth began to appear in rapid succession, and the other rickety manifestations entirely vanished.

A FEW POINTS IN TREATMENT.

A second example of almost equal force is supplied by a child lately attending the casualty department of St. Bartholomew's Hospital, who at the age of

nine years presented all the signs of continued and active rickets. She was dwarfed, knock-kneed, and very weak, while the epiphyseal enlargements of rickets were extremely prominent. She was placed upon a starchless diet for six months, and was kept from walking by the application of splints. At the expiry of this interval I was disappointed to find that I could detect no improvement, and referred her to the Orthopædic department to see whether surgery could benefit the deformity of the legs. Here a skiagram of the bones was taken, and contrary to my expectation, the epiphyses showed no signs of active disease. The epiphyseal line was natural in spite of the continued enlargement of the ends of the bones. The splints were removed, and under treatment by massage a rapid improvement of the general condition ensued. There can be no doubt I think that the prolonged reduction of carbo-hydrates produced the cure.²

The correct treatment of rickets lies therefore in the proper adjustment of the carbohydrate supply.

This can be achieved in two ways, either by levelling up the fats and proteids to correspond with the high carbo-hydrate intake common in the case of rickety children, or by levelling down the carbo-hydrates. I have little doubt that the latter is the wiser plan, though the other is that more commonly employed. Children thrive well on a diet poor in carbo-hydrates provided proteids and fats are well represented, while the levelling-up method involves the risk of over-taxing the digestion. For a rickety child of two years the following is a suitable daily menu, if digestion is good. Milk, two pints, with the occasional addition of some malted food such as Mellin's. A half-ounce or an ounce of scraped beef or fish, or an egg. A baked apple or some orange-juice, with a teaspoonful of cod-liver oil and malt given three times a day.

¹ "Journal of Experimental Medicine," 1898, iii. 293. ² This case, with other examples of continued rickets is reported by Mr. R. C. Elmslie, St. Bartholomew's Hospital Reports, 1906, p. 155.

PRACTICAL NOTES ON DIAGNOSIS AND TREATMENT.

Treatment of Boils.

ONE part of chloral hydrate in six parts of cherry laurel water is recommended as a local application to boils. It is applied on spongio-piline.

Spasmodic Asthma.

To stop the attack a teaspoonful of the following may be given every half-hour until the patient is relieved:—Chloroform 3j, ether 3iss, syrup of acacia 5j, compound tincture of cardomoms 3j.

Eczema Intertrigo.

SALOL 3ss mixed with powdered starch 3iiss has proved serviceable and curative in cases of eczema intertrigo. It gives prompt relief to the local irritation.

Acute Tonsillitis.

PURE guaiacol applied locally by means of a cotton swab is said promptly to check tonsillitis. In most cases two applications are sufficient. Care must be taken that none of the drug reaches the larynx.

Injection of Cocaine.

COCAINE should be injected into the substance of the skin or mucous membrane, and not into the sub-mucous or subcutaneous tissue. The injection, that is, should be intradermic, and not hypodermic. In this way the risk of introduction into a vein is avoided.

Sub-acute Cystitis in Women.

In the very large majority of women it is quite impossible for the subject completely to empty the bladder while lying perfectly flat on the back. Therefore, if women, on account of long illness, are placed flat on the back sufficiently long, some urine is almost certainly retained and in consequence changes are prone to take place in the urine which give rise to symptoms of cystitis. In such a case the treatment should not be by washing out and the administration of drugs, but by placing the trunk as soon as possible in a position in which the bladder can be emptied.—*Sir Wm. H. Bennett.*

Extract of Cotton Seeds in Deficient Lactation.

PROFESSOR GILBERT has tested the effect of an extract of cotton-seeds given to nursing mothers in whom the supply of breast milk was deficient. He has obtained results which encourage the hope that the extract will enable nursing to be continued in such cases.

Paraganglin in Prolapse of the Rectum.

PARAGANGLIN, an extract of the medullary substance of the supra-renal gland, is recommended in prolapse of the rectum in children. It is usually applied locally, but has also been given successfully by the mouth. Dose: 3 to 40 minims in twenty-four hours for an infant of one year.—*British Medical Journal.*

Asthma in Childhood.

A GOOD many cases improve with advancing age, and the affection may cease at or before puberty. Emetics are of great service in the acuter attacks, and lobelia and belladonna have much remedial value in the less severe. Of all the inhalations I have used the fumes of nitre seem to me the best.—*Dr. H. B. Donkin.*

Opium in Graves's Disease.

BELLADONNA and digitalis are no doubt useful and have their place in the treatment of this disease; but opium in full doses and at regular intervals not only soothes the nervous distress and palpitation, but arrests the diarrhoea and vomiting, which all other drugs seem powerless to control. It is in these complications that the chief danger lies.—*Dr. W. B. Cheadle.*

Carbolic Acid Hypodermically.

To relieve such painful conditions as muscular rheumatism, neuralgia, sciatica, &c., Dr. André Martin has recommended the hypodermic use of carbolic acid: He uses 10 to 15 minims of the following solution: Pure crystallised carbolic acid 2 parts, alcohol or neutral glycerine 2 parts, distilled water 100 parts. One to three injections may be given daily.

FATAL ANÆSTHETICS.

A CASE FOR INQUIRY.

THE Coroner for Southwark, Dr. Waldo, recently held an inquest on the bodies of a child and of a woman, who died in Guy's Hospital during the administration of anæsthetics. He remarked that these complete a total of thirty such fatalities from that institution within the past six years, the last four of which occurred within a month. These figures were increased to thirty-one and five respectively by another unfortunate accident very shortly after. He is reported to have said, "In all these four cases the anæsthetics were administered, not by any of the eight anæsthetists of the hospital staff, but by other persons. Is it wise to allow men with less experience than these special anæsthetists to do this work?" It further appeared from the evidence that in the last two cases the administrators were newly qualified men holding no appointment in the hospital whatever. While in the buildings they were requested by house officers to act as stop-gap anæsthetists in order that the latter might operate.

The prominence which the above figures and Dr. Waldo's comments have received re-opens questions which have been discussed before now in the London teaching hospitals, and in which the lay press is naturally beginning to take interest. The compilation of statistics showing the fatality rates of anæsthesia in different institutions is, at first sight, quite simple; so many cases, so many deaths, such and such a ratio. But the more closely such statistics are scrutinised, the more complex their problems appear. At the present time an appreciable fraction of the cases brought to operation at the general hospitals consists of patients moribund from such serious conditions as perforated gastric and typhoid ulcers; strangulation of gut, internal or external; extensive cranial and other injuries, and so forth. While advanced surgery continues to regard no case of this sort, however desperate, as hopeless, so long must a certain proportion of deaths under anæsthesia be unavoidable, no matter how highly skilled the administration. In one general hospital, whose returns we have analysed for the past three years, about 40 per cent. of the fatalities can be fairly described under this category. Indeed, the strange thing is, not that there are so many accidents with this class of patient, but that there are so few; many of the most hopeless are operated on in the middle of the night, unprepared for anæsthesia in the technical sense, exhausted sometimes by rough and ready methods of transport to hospital and by their condition, and presenting often such obstacles to successful anæsthesia as fecal vomiting and the like. The brands thus snatched from the burning, increasing in numbers yearly, go to the credit of the surgeon; the occasional death, though it anticipate nature by but a few hours, if it occurs "on the table" goes to the discredit of the anæsthetist.

Even some of the special hospitals have difficulties which must be taken account of in considering their records: thus the prolonged and extensive opera-

tions on debilitated and constitutionally unsound patients which form a large part of the work in the Cancer Hospital, must tell unfavourably on the operating theatre mortality there; and some others of the special hospitals have similar disabilities. Among the general hospitals also there are different proportions of out-patient and in-patient operations, of local and general anæsthesias, which all confuse the comparison of mere statistics. Another point to be remembered is that not all deaths during operations are caused by anæsthetic drugs: they are occasionally the fault of the surgeon alone, although this fact does not as a rule appear at a Coroner's inquest. We are not suggesting that this has been the case at Guy's, but undoubtedly certain deaths at other hospitals have been caused in that manner. Such cases are included in hospital reports among deaths during anæsthesia, and in the nature of things it is almost impossible to detach them from the statistics. There are yet other cases, fortunately rare, the discredit of which in no way attaches to the anæsthetist. For instance, a physician on the staff of a teaching hospital once sent an in-patient whom he was treating for lymphadenoma to the out-patient dental-room for an extraction under gas. The dental surgeon and the anæsthetist had no warning of the constitutional condition, and no blame could attach to the latter when the ensuing post-mortem revealed a trachea almost occluded by the pressure of enlarged glands; yet that case also is included among the returns of death during anæsthesia. Similarly, among the recent fatalities at Guy's Hospital, we notice that in one case an enlarged thymus and general status lymphaticus were present. This condition is so seldom diagnosed during life that it must always be a pitfall for the wariest anæsthetist, and it has, as a matter of fact, been responsible for quite a number of deaths at various London hospitals.

Before coming then, to the point especially raised by Dr. Waldo, it is evident that statistics, unless very carefully sifted, may easily lead to error. Face to face with the facts which we have quoted from the Coroner's remarks, his question is a natural one, and the answer invited is evidently a negative; but, as in all mortality statistics, there is much to be said in arrest of hasty conclusions. No doubt a system, or lack of system, which allows house officers to invite the first man they meet to administer an anæsthetic, is thoroughly unsound and dangerous to the public. No doubt a mortality of thirty-one in six years is higher than can be completely explained by the adventitious causes which we have rehearsed. We are not defending Guy's, because it seems as if something must be wrong there. Whether it is the teaching of anæsthetics, which is now rightly compulsory before a student is admitted to the qualifying examinations; whether that inexperienced men are allowed to undertake difficult and dangerous cases before they have mastered the elements of the craft by practice under supervision upon easy and straightforward

ones; or whether the result of any other inherent defect in the system we do not know. It may even be partly a run of unavoidable accidents that has swollen the figures of the past six years. But, in any case, there are other points to be considered before we answer the Coroner's question.

In the first place, we have examined the records of another London hospital where the average yearly number of anæsthesisations must be as great, excluding dental cases, at any rate, as at Guy's. There we must go back $12\frac{1}{2}$ years to accumulate a total of 31 deaths (in about 85,000 cases). At this hospital the teaching of anæsthetic work is carried out in an exceptionally complete way, and, curiously enough, the whole of the fatalities have occurred in the practice of the regular administrators. It is, however, fair to add that probably a larger proportion of the work falls on them than in the Borough. A similar surprise appears from the records of yet a third teaching hospital, where there have been seven deaths in the past three and a half years, six of which were at the hands of the staff anæsthetists. These, no doubt, are merely a series of fortuitous coincidences, but they serve to dispel the idea that anæsthesia at the hands of well-trained hospital residents means danger to the public.

And there are yet other considerations in which the common welfare is involved. The giving of anæsthetics under supervision is very valuable training, especially after the exposition of general principles by the teacher in lectures or text-books. But such supervision must give way to independent work; the very knowledge that an expert is at hand to correct errors or deal with emergencies takes away that sense of serious personal responsibility without which no man can become a capable anæsthetist. This training, by instruction and by practice under supervision, and, lastly, by independent administrations commencing with short simple cases in out-patient and casualty rooms, and leading in the end to difficult and "emergency" work, is the kind of training which results in a large number of really capable anæsthetists leaving our London medical schools annually. An ex-house officer from a London teaching hospital who starts practice in the country is generally soon known as the best anæsthetist in his locality: indeed, the mere fact of his having held such an appointment is regarded almost of itself as a proof of his ability in anæsthetic work.

This state of things is not only gratifying to the school authorities, but also extremely important to the general public outside London. If Dr. Waldo's question is to be answered by an unqualified negative, then the better kind of general practitioner will be forced to gain his experience of anæsthesia, not in the comparatively safe way already outlined, but without help and often with imperfect appliances under the difficult conditions of private practice; a state of things which we do not think would tend to the benefit of the community. It is absurd to exalt the specialty of anæsthetic administration to the level of, let us say, gynaecology or ophthalmic surgery; some specialists, indeed, in anæsthesia aspire to stand on a footing similar to that of the consulting physician or

surgeon. For the study and practice necessary to become a first-class anæsthetist bear no comparison with those required in the specialities we have mentioned. Any house officer of ordinary intelligence—he it remembered that in a teaching hospital he is one chosen out of many—after he completes his office can become a highly skilled anæsthetist, if he be not already one, in a very short time, and in a year his proficiency will be hard to distinguish from that of the elect. Moreover, it must be borne in mind that the reason of this is the excellent opportunities of which he avails himself whilst a house officer for learning the craft of anæsthetic administration. At the same time no one can realise more clearly than we do the grave danger of unskilled or partly skilled anæsthetists. We acknowledge that they exist, and that they are a reproach to the profession; but the teaching at many schools is so good, and at all it has made great strides recently, that their proportion in the profession must be steadily decreasing.

We have not touched upon the expense necessary to provide a staff of resident and visiting anæsthetists, at every hospital, large enough to cope with every possible simultaneous operation or emergency. It would certainly be no mean sum, and we doubt whether any appreciable gain in efficiency would result. Neither have we considered the effect upon the house service of a hospital which adopted regulations depriving residents of their chances of becoming familiar with this branch of practice. We think it quite possible that some of the students who do best for their hospitals as resident officers might accept appointments elsewhere, rather than forego these opportunities. So our answer to Dr. Waldo's question must be much more a qualified Yes than an unqualified No.

THE BOOK WORLD OF MEDICINE AND SCIENCE.

MEDICAL PHILOSOPHY. (?) By W. RUSSELL. Published by Henry Kimpton, London, and Alexander Stenhouse, Glasgow, 1907. Pp. xvi.+504. Price 21s. net.

THE author believes that two propositions do not now receive proper respect from the medical profession. They are, that the origin of all disease whatsoever is a humour caused by indigestion, and that indigestion is always curable by purgation. If these premisses are absolutely infallible, as he is convinced, his conclusion is logical enough that every illness, local or general, demands purgatives, and purgatives only. In support of this theme he presents a mass of quotations from the works of medical and other authors. These constitute about 95 per cent. of the text, and of them a similar proportion date back half a century or more. They are culled from a field wide enough to include Kingsley and the *Family Herald*, Goldsmith (misquoted by the by) and Rider Haggard, Hippocrates and the *Family Doctor*, the Bible and *Lloyd's*! About half the chapters begin with the same short summary of the argument; but, lest this should pall with repetition, the punctuation is ingeniously varied so that no two versions are actually the same. We cannot refrain from quoting part of the last sentence: "The other so-called remedies of man . . . diuretics . . . massage . . . local applications, etc., are unworthy of mention; . . . in showing that others have condemned them I should only be wasting your time, which might be more profitably employed in studying the other parts of this work."

PATHOLOGY IN GENERAL PRACTICE.

COCCI: THEIR DEMONSTRATION AND SIGNIFICANCE.

(Continued from page 90.)

THE streptococci occur in chains of varying length, and at one time were divided into different species, such as the *streptococcus longus*, the *streptococcus brevis*, the *streptococcus of erysipelas*, etc. It is now more usual to consider all as simply varieties of one group, as by growing them on different culture media one form may easily be changed into another, and at the same time may have its virulence increased or diminished. Streptococci are capable of producing many different lesions in the human subject, the general type being that of extending inflammations with or without the formation of pus. In the secretions of the mouth and in sputum, forms may often be demonstrated which do not seem to produce any lesions, but apparently under certain conditions, when any lowering of the vitality of the tissues takes place, they may take on a more important rôle and cause varying grades of inflammation of the throat and also other pathological conditions. In addition, they may be associated with peritonitis, puerperal septicæmia, septicæmia from post-mortem wounds and otherwise, cellulitis, suppuration in joints, meningitis, pleurisy, ulcerative endocarditis, lymphangitis, and they are also present as the causative agent in erysipelas. It is specially important to be able to diagnose them in sloughing conditions of the throat with the formation of false membranes, but in order to be certain that the case was not true diphtheria, cultures would have to be made as well as a mere direct examination of smears.

THEIR DEMONSTRATION.

All that is required is to make smears from the pus or sero-purulent material, and stain these by any of the simple stains mentioned in the last article (April 13, 1907, page 30). Gram's stain may also be employed; they retain this, and very pretty specimens may be obtained by using any pink or red counter-stain to colour the tissues in order to show up the cocci. It is not necessary to go in detail into the question of the growth of these organisms on culture media; they grow with greater difficulty, have totally different appearances, and die out much more easily than the staphylococci.

THE PNEUMOCOCCUS.

Closely allied to the streptococci is a coccus which has been variously known by the names of the pneumococcus, the diplococcus pneumoniae, the diplococcus lanceolatus, and the streptococcus pneumoniae. Best known by the name of Fraenkel's pneumococcus, this organism is of great importance, as it is the commonest cause of lobar or croupous pneumonia. Just as in the case of the streptococci, it is said to be often found in the nasal and mouth secretions of apparently healthy people, an increase of virulence with multiplication of numbers rapidly taking place together with an extension to the lungs when any circumstances arise to lower sufficiently the vitality of the individual. For example, an

intoxicated man, unable to reach home, sleeps out on the damp ground; in many instances there results an attack of pneumonia. In addition to lobar pneumonia, the pneumococcus may occur either by itself or associated more commonly with other organisms in broncho-pneumonia and bronchitis. By direct extension from the lung, empyema, pericarditis, or endocarditis, may in turn appear, while purulent meningitis due to it is by no means uncommon, either as a primary condition or secondarily following definite pneumonia. Further, it has been found in purulent peritonitis, otitis media, liver abscesses, and in arthritis. Hence it will be seen that its distribution may be a wide one and its scope for doing serious damage very extensive. Morphologically the coccus can be fairly readily distinguished. It occurs either in pairs or in short chains, each individual having its free extremity pointed, its opposed surface flat, this giving it the appearance of a lancet, from whence its name lanceolatus is derived. In addition to this a very distinct capsule can generally be made out around them, as a rule showing up as an unstained areola or halo. To demonstrate them, make films in the ordinary way. Pus removed by an exploratory puncture from an empyema, for example, or sputum from a suspected case of pneumonia, may be stained with carbol-fuchsin for half a minute, then decolorised slightly by washing in hot or almost boiling water for a few seconds, dried, and mounted. This method shows up the capsules very well, especially in the organisms from the pure pus from the pleural cavity, while if the case is one of pneumonia, the prevailing germs present in the sputum will be diplococci, and in many the capsules will also be readily detected. If Gram's stain is also retained we may be tolerably certain that we are dealing with Fraenkel's pneumococcus. The pneumococcus grows with difficulty on culture media, special ones having to be adopted for its development, and it dies out very rapidly, much more quickly, for example, than its relation, the ordinary streptococcus.

MICROCOCCUS TETRAGENUS.

Another coccus that may be met with is what has been called the micrococcus tetragenus. It is another of the pus producers, and is common in the secretions from bronchiectatic cavities in the lungs, and also in gangrenous conditions of those organs. It sometimes forms ordinary abscesses, a small one under the finger nail, once examined, probably got from a post-mortem wound, showing a pure culture of this organism. It is easily recognised morphologically, as owing to the fact of its dividing in two planes at right angles to one another, it is generally seen in groups of four, or tetrads sometimes surrounded by a faintly stained capsule. Any of the ordinary simple staining methods may be employed to demonstrate it, and it also stains by Gram.

THE GENERAL PRACTITIONERS' COLUMN.

[Contributions to this Column are invited, and if accepted will be paid for.]

EXPERIENCES OF A "BACK BLOCK" PRACTICE.

BY ONE WHO HAS TRIED IT.

THE practitioner in search of an opening has often noted with dismay the numbers of brass plates which brighten the streets of any town in the kingdom. He is apt to turn his thoughts to the wilds of Further Britain, where brass plates are replaced by painted wood or iron signs, and where he hopes to find the population under-doctored. A truthful account of one such practitioner's experiences may be of interest. If, in spite of it, others shall venture to follow my steps, I will only say, with some famous character one used to read about in one's Livy: "*Macte virtute, puer!*"

Mindful of etiquette, I called on several practitioners, of whom the only one to return my call was a recent arrival. Manners are apt to be at a discount in all new countries, where, indeed, I have known a man laughed at for taking off his hat to a lady, and have seen a woman with a baby make several ineffectual attempts to swing herself up into a coach, though a crowd of some dozen men was standing by.

In talking over my chances with established practitioners they all urged my settling anywhere else but in their own neighbourhood. This I suppose I should take as a compliment. In any case, I came to the conclusion that they were right in averring that the town was as full of doctors as any London suburb. The only new arrival who was doing really well was one who had announced his intention of adhering strictly to the line of consulting surgeon; he told me practitioners were just beginning to realise that he did not mean to steal their patients. His opinion was that the ordinary colonial practitioner was apt to be an all-round man, so that there was not much opening for specialists. He excepted the towns with universities or medical schools, but in these he said the openings for specialists were already well filled. There seemed to be a consensus of opinion that the wisest course for a newly-arrived medico was to settle in some fairly good centre in the "Back Blocks," make a reputation locally, and then remove to a large town fairly near the connection he had made. "Back Blocks" are the equivalent of the American "Backwoods," just as "New Chum" is the Australasian for the American "Tenderfoot."

The "New Chum" arrives with a heart for any fate: so I proceeded to inquire whether it is possible to obtain any sort of Government appointment in these same "Back Blocks." I found that a humane but misguided Government does undertake to subsidise doctors settling in undoctored localities. The Government takes no initiative, however: even in its own engineering camps, where men meet daily with most serious accidents in felling trees and blasting cuttings, tunnels, etc., it is many months before a surgeon is appointed. Even then I know of one instance in which the doctor was not on the colonial register, and was really only capable of rendering first aid. With regard to subsidies, the initiative is left to the doctor. His course is to call

on the local magnates—stationmaster, schoolmaster, a (rare) parson, and a few leading settlers—and to suggest that a hundred miles by bridle track, ballast train, and coach to a doctor is rather hard on a broken leg and impossible for a *placenta prævia*. He must further enlarge upon this and that degree or diploma and this or that amount of experience, and (to descend to *terra firma* after these sublime heights) explain his willingness to settle among them if they will guarantee so much a year. If the settlers think well of him they form a committee which hunts up the inhabitants and gets each to guarantee a certain sum yearly. The committee then approaches the Government and a subsidy of some £50 or so is granted to meet the settlers' guarantee of £150, say. In many cases the settlers proceed to build the doctor a house and dispensary, and meanwhile he lives at the village "boarding house."

I found it often very difficult to get one's money, even when one had received a Settlers' Guarantee, and the Government subsidy, which never exceeds £75, is not enough to live on. It must be remembered that though meat is cheap, everything else is extremely dear. The doctor must, of course, dispense, and from a newcomer Surgical Supply Associations and druggists expect an early settlement of accounts. The difficulty of getting one's fees is due to two facts: the shifting nature of the work of most of one's young bachelor patients, and the slow development of farms. One settler on my presenting a moderate bill for a case of fracture of the skull pointed to his most juvenile calves, and promised to pay me when these should have turned into beef! Quite a number of men left the station without address before I sent in my bill at the end of the month. Many people grudged the doctor's bill who were able to afford it, simply for the reason that they came of classes which at home had been accustomed to gratuitous medical relief. The consequences of such a state of things rebound on the settlers themselves. I heard numerous complaints that this doctor was alcoholic and that injected morphia, that the third was a chemist who could only extract teeth, and that the last never made a correct diagnosis except by accident, and that then his treatment was a failure. With very hard conditions of work—long night rides along bridle tracks, with rushing rivers to swim or log-bridges to cross without a hand-rail, scorched with sun in one colony, drenched with rain in another, and frozen with cold still further south—and conditions of pay such as I have described, it stands to reason that if a man goes into such a region at all it is only because, if capable, he is young and will leave it as soon as he discovers the conditions, or because he has failed elsewhere. The remedy is for the Government to appoint and to pay doctors in every new district, recovering part at least of the cost from settlers and residents in the shape of a poll-tax.

RESIDENT MEDICAL OFFICERS' DEPARTMENT.

[Contributions to this Column are invited, and, if accepted, will be paid for.]

THE RELATIONS OF RESIDENTS TO STUDENTS.

THE subject of the relation of hospital residents to students is one of much interest, for it has a considerable bearing upon the wider question of medical education. The informal teaching conveyed by the house physician or house surgeon to his clerks or dressers during the morning round is a factor in clinical education almost equal in importance to the instruction given by the visiting staff at their state visits. The resident medical officers in a large teaching hospital are in close and continuous touch with the students under them. It is their special duty to impart elementary lessons in the grammar, as it were, of physical examination and diagnosis, leaving the finer points of syntax for their seniors to expound. They thus pave the way for the formal teaching of the physicians and surgeons; and the value of this largely depends on the thoroughness with which the residents perform their part. As pupil teachers in the great school of physic, they wield much power for good or for evil, not only by precept, but also by example.

Firstly, with regard to precept, and to the aims and limits of the house officer's teaching. The house physician cannot include the whole field of medicine in his instruction. He should confine himself to clinical pathology and the physical signs in chest, abdomen, and nervous system. It is outside his province to go deeply into morbid anatomy and differential diagnosis, and it is equally a mistake for him to compete with cram-books and epitomes. If, at the end of their first three months, his clerks can go over a case methodically, and can recognise such common physical signs as bronchial breathing, friction, a presystolic murmur, optic neuritis, or an aortic pulse, and can stain ordinary bacteria and do a blood-count or a Widal's test with accuracy, he has done his duty by them so far as actual instruction goes.

Similarly the house surgeon need not try to impart much book knowledge to his dressers. He should first drill them thoroughly in the principles and practice of asepsis. Then he should teach them to describe in precise language the injuries, morbid conditions, and operations that they have seen, and to recognise and apply the commoner instruments and appliances. He may leave the rest of surgery to be read in books or learnt by experience or taught by his chief.

With regard to example, the house officer who sets a high standard of professional conduct, by careful and systematic investigation, by the exercise of a critical and deliberate judgment, and by punctuality and kindness, exerts a lasting influence for good upon those students fortunate enough to hold their first clinical appointment under him. On the

other hand, slovenly examinations, haphazard and premature diagnoses, dilatoriness and want of consideration for others, have a most pernicious effect upon the receptive minds of younger men. It is the first step that counts, in clinical medicine as in all else. Habits, good or bad, acquired by imitation in the early days of hospital work, soon become fixed beyond recall. The house surgeon who keeps in mind this responsibility towards his dressers, and lays himself out to set a good example to them, usually finds at the end of his term of office that his own powers of observation and deduction and his general clinical acumen have developed beyond all expectation.

In most of the great teaching hospitals the personal relations between the residents and the students are of the friendliest. In the wards discipline is maintained, and the house surgeon's wishes are regarded as commands, to be obeyed without question. This is an unwritten law, on the observance of which the work of the whole hospital depends; and it is respected with the utmost loyalty and good humour. Outside the wards the resident officer assumes no airs of superiority or authority, and is treated by his clerks and dressers as one of themselves. Often they are old school friends or college acquaintances, whom he has outstripped in the race for qualification. Often, too, the intimate relationship between house surgeon and dresser is the beginning of a life-long friendship.

Thus in these hospitals—and they form the large majority—a definite but unexpressed arrangement of give and take exists between the junior staff and students. The residents instruct the students to the best of their ability in the rudiments of their art, and afford them every opportunity for seeing and doing things for themselves. In return for this the latter co-operate loyally with their superior officers, relieving them of many tedious small duties, faithfully carrying out their wishes, and reserving all chaff and criticism, however well deserved, for use outside the wards.

But there are other hospitals, less rich, perhaps, in tradition, less fortunate in tone, in which from time to time the students and residents are not on such friendly terms. Here the students only obey those orders which suit their own convenience, while the residents maintain at all times an intolerable attitude of superiority, quite out of proportion to their merits or their position. The continuance of this absurd state of affairs is probably due to faults on both sides. The origin of the trouble may have been some thoughtless comment, overheard, passed on, distorted beyond recognition, and finally interpreted into a declaration of war by the leaders of the injured party. Whoever was in the wrong, it behoves the residents, as being the senior men and responsible for the good name of the hospital, to make the first overtures of peace.

THE EVOLUTION OF MEDICINE.

ANCIENT EASTERN METHODS.

II.—THE MINISTRATIONS OF A HOLY MAN.

THE following story is told in the "Bagh O Bahm" of a certain young prince who had fallen in love with the daughter of the King of the Jins. The young lady in question had most improperly come, uninvited and unchaperoned, to pay him a visit, and had been suddenly removed by her father. From love and longing the prince fell ill, and his father, to whom this was reported, came to visit him, bringing with him a motley crowd of healers—"acute physicians" (Hakeem), truthful astrologers, wise doctors (Mullah), eunuchs, dervishes, travelling devotees (Salik), and hermits (Mujzub)." These all treated the patient simultaneously, each according to the views of the class he represented. The prince himself tells the story. "The physicians," he says, "wrote prescriptions for the defect of my brain and the strength of my heart, the doctors gave me charms and amulets to drink and to place near me. They began to pray and to blow upon me (this to exorcise demons). The astrologers said 'This appearance comes from the revolutions of the stars, be pleased to make propitiatory offerings.' In short each one said words according to his own art."

APPEALING TO A SPECIALIST.

Some months had passed, and the patient had made no progress towards recovery, when a certain merchant arrived at the capital and was brought before the King, who inquired whether in the course of his travels he had seen or heard of "a perfect physician." The merchant replied: "Oh, Point of Adoration of the Universe, your slave has made many journeys, and in Hindoostan, in the middle of a large river there is a small hill; there a holy man of the Hindoo faith (Gusain), with matted locks, has made a temple to Shiva and an assembly house and a lovely garden. There he lives, and this is his custom. Once in the year, on the day of Shevrat, he comes out of his holy place and swims in the river and amuses himself; and after his ablutions, when he begins to go back to his deerskin praying carpet, then the sick and the possessors of pain of every country and clime, who come from a great distance, collect about his door. There is a great crowd of them. That religious man is in the habit of examining the urine and feeling the pulse, and, having written a prescription for each one, he gives it and goes away. God has given to him such a healing hand, that immediately on drinking the medicine, relief comes and the disease goes away, and remains away. I have seen this thing mine own self, and I have remembered the power of God in that he has granted such servants." The fact that both the Prince and the merchant are Mahomedans does not prevent the latter from suggesting a visit to this Hindoo idolator, nor the former from availing himself of his aid. The merchant offers to take the prince to India with him, and in support of his proposal, makes the following remark: "And it is evident that this plan is good, because, from eating the air of many countries and from change of food and water, cheerfulness may come into his temper." The virtues of a sea voyage as a cure for ill-health and depression were already recognised. The prince, the merchant, a nobleman of the state and a large retinue journey together to India. The prince thus describes the scene on the hill in the great river: "When two or three months had passed by, about four thousand sick persons assembled on that hill, and all were saying 'Now if God wishes the holy man will come out of his temple, and to all by his order there will be a complete cure. In truth, when the day came, in the

morning, the holy man came out like the sun and bathed in the river and swam. Having gone across he came back again and applied the ashes of dry cow-dung to his whole body. He hid the whole of his fair body like a spark among the ashes. He made a caste mark of a superior kind of sandalwood on his forehead, fastened his loin-cloth, threw his towel over his shoulder, coiled up his topknot, twisted his mustachios, and fastened on his high shoes. From his countenance it appeared that he reckoned the whole world of no account. Having taken a jewelled pen-case under his arm he, looking in every direction and giving prescriptions, came near to me. When our four eyes met he stood still, and, pondering deeply, began to say 'Come with me.'"

THE OPEN-AIR TREATMENT.

The holy man settled the prince in the lovely garden he had made, and for forty days gave him no further treatment. At the end of that period he visited him, and, being pleased with the improvement he saw in him, bade him continue to wander about the garden and eat any fruit he might fancy. He also gave him a china cup filled with a medicine compounded with honey, and bade him "Be pleased to be so good as to eat six mashahs (a mashah is about 120 grs.) without fail daily." The prince ate, and derived much benefit from the treatment, which continued on these lines for a long while. The prince beguiled the time in reading a book of magic which he had found, and not till the expiration of a year and a day did he see the holy man again.

"When the holy man came again," the prince relates, "I salaamed to him. He gave me his pen-case and said, 'Come with me.' I went with him. When he went out of the door the crowd began to bless him. The nobleman and the merchant, seeing me with him, fell at the feet of the holy man and began to give him thanks. He went to the bathing ghaut on the river according to his custom and made his ablutions and prayers. It chanced that among the crowd of lunatics his eye fell upon a young man, handsome and shapely, who from weakness had not the power to stand. He bade me bring him along. When he had given medicine and remedies to all he went into a private room."

AN ANCIENT OPERATION.

The holy man proceeded to operate on his patient, assisted, or, at least, attended by, the prince, who thus describes the events which followed: "Having cut away a small piece of this young man's skull he desired to remove with forceps a centipede which was sitting on his brain. This came into my thought, and I up and said: 'If you make the pincers hot in the fire and put them on its back, then it is good, of itself it will come out, but if you shall pull thus, it will not let go of the pith of the brain. Then there will be fear of (the young man's) life.' Having heard this, he looked my way, and, having risen in silence, he went to a corner of the garden, and, having seized a tree in his embrace, he noosed his neck in a lock of his own long hair, and departed (this life)." Professional sensitiveness could not well go further than this. Probably the prince was the first who had been bold enough to criticise the methods of the holy man, and criticism he could not endure. The prince was very grieved at the death of his benefactor, and buried him with his own hands; then, constituting himself both his heir and his executor, he loaded all the wealth of the temple into his ships and returned home. The unhappy patient appears to have been left forgotten on the operating table.

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

THE UNITS OF GENERAL HOSPITAL CONSTRUCTION.

THE NURSING AND WARDMAIDS' STAFF FOR EACH UNIT.

ALTHOUGH a hospital is constructed on the ward unit system, it does not necessarily follow that the cost of administration per bed, or per patient, should be greater than one worked on the old principle, where patients of different members of the staff are treated in the same wards. In practice it is found to be much more satisfactory and more economical to assign a separate unit to each member of the visiting staff. Under this system the exact cost of each of the units can be compared, the number and nature of the cases and operations noted.

With regard to the staffing of the ward units of a general hospital, there are many points to be considered. A resident assistant should be allocated to each unit to devote his undivided attention to the patients in the wards. On no account should he be called upon to attend the private operations of the visiting surgeon, or act as his assistant outside the hospital. This either takes him away from his proper duties or deprives him of the necessary outdoor exercise which helps to keep him fit for his hospital work, and he takes the place, without in some cases the usual fee for such assistants, of a young graduate beginning private practice, who has the time to devote to such work.

The proportion of nurses to patients varies considerably in different countries, in different hospitals in the same country, and even in different units of the same hospital. In preparing plans for a hospital the architect is at once met with the difficulty that no standard has yet been fixed giving the number of nurses and the accommodation to be provided for them in proportion to the number of patients. In every hospital there is what should be regarded as the permanent nursing staff. In addition, there is the emergency staff, and allowance must be made for a number of nurses being on holiday and a few on the sick list. In fixing, then, the number of nurses in proportion to the number of patients, all these factors must be considered.

Further, in calculating the number of nurses required for a hospital with a certain number of beds, note must also be taken of the number of nurses engaged in the casualty and out-patient departments. It is claimed for some hospitals that the number of nurses engaged in their out-patient department is very large in proportion to the number of their occupied beds. This is a matter that can be easily stated, and due allowance can be made in making any calculation of the total number of nurses required per occupied bed. Other hospitals claim that their nurses have shorter hours and longer holidays, and in consequence their nursing staff is greater in proportion to the number of occupied beds, as compared with other hospitals. But in dealing with this question we must not only

consider the number of nurses required in proportion to the number of occupied beds, but must also find out the proportions of trained nurses, nurses and probationers. In some hospitals, for example, the probationers all pay a premium and receive no salary; in others a nurse is considered fully qualified after two years' training. In most hospitals the proportion of first year probationers to nurses is about 28 per cent. It is therefore important to know exactly the total number of nurses employed, the number in the different years of training, and the number fully trained, for if we were to draw conclusions from the salaries paid to the nursing staff as a whole, it might be found that some hospitals have a larger proportion of probationers to nurses than others, and as a result the cost per bed for nursing is much smaller than where the total number on the nursing staff is the same, but where the staff is more experienced and more highly paid. It must be evident, therefore, that in dealing with the efficiency of the nursing staff, the total number on the staff and the sum paid for nursing is not enough. We must have details of how the staff is constituted and the relative proportion of first-year probationers to nurses. In no case should such probationers for the purposes of the work in the hospital constitute more than one-third of the staff. In old buildings where the wards are small and scattered, a larger proportion of nurses is required than in a modern hospital constructed and administered on the complete unit principle. But if properly constructed and administered, and *no unreasonable demands are made*, the proportion of one nurse to every three patients can be regarded as a fair workable standard. In constructing a modern hospital, therefore, an architect should make provision in the nurses' home for a separate bedroom for one nurse to every three occupied beds in the hospital. He should, however, provide some extra bedrooms, say 7 per cent. of the total, or 40 bedrooms as a maximum for every 100 occupied beds.

The whole nursing staff is under the direct supervision of the matron, and a permanent staff is assigned to each of the different units. A ward sister is placed in charge of each unit, and she is directly responsible to the matron for the efficient nursing of the patients. An emergency nurse should only be asked for when there is special urgency; and in making requisition for an extra nurse, the sister should inform the matron of the particular patient to whom the nurse is to be assigned and the special nature of the urgency. When the urgency is over the sister should inform the matron, the nurse should be relieved, and be available to take duty elsewhere. The ward sister should see that the instructions of the physician

POINTS IN THREE LONDON GENERAL HOSPITALS.

The Metropolitan Hospital.

SITUATED in one of the poorest and most densely populated districts of London, *i.e.*, Kingsland Road, E., this hospital has never yet succeeded in attracting all the financial support which it needs. It is an institution which should have the special consideration and monetary aid of the Jewish community, to the poorer portion of which it ministers with prodigal generosity. The number of in-patients under treatment shows a steady development, having grown from 1,131 in 1901 to 1,548 in 1906. The average daily number of beds occupied has increased by 25 per cent. in the five years—namely, from 86 to 106. The average cost of each in-patient as stated by the hospital authorities has fallen from £1 18s. 3d. to £1 14s. 1d., an evidence of the successful efforts made by the Committee and officers to reduce expenditure. The out-patients continue to increase, to our regret, but the work of the almoner has been vigorously continued with a view to reduce the abuse of this department to a minimum. This hospital is worthy of the attention of the benevolent, from the circumstance that it has a provident department which affords the working classes in its neighbourhood an opportunity to secure adequate medical treatment to themselves and their families when they are ill by small periodical payments. Out of 41,642 new out-patient cases 3,469 were referred to the provident department or to provident dispensaries during 1906. We could have wished that the number so referred had been considerably larger. Lord Howard de Walden, as Chairman, takes an active interest in the work of the hospital, and we have little doubt that under his guidance increased financial support, additional economy, and further efficiency in the administration will be manifest each year.

The Middlesex Hospital.

THE Middlesex Hospital is entitled to receive the generous support not only of Londoners but of the country generally, from the circumstance that it has maintained an in-patient department for cancer cases since the date of its foundation in 1745. It can proudly claim to be the first hospital in the British Islands which made special provision for the treatment of cancer. The administration has always been conservative, but in recent years it has displayed a progressive spirit, and it can claim that its numerous departments are as efficient and ably administered as any in London. Situated as it is in the centre of probably the wealthiest class of traders in London, *i.e.*, the great shopkeepers of Regent Street, Oxford Street, and the neighbourhood, we have always felt that an active propaganda on behalf of the institution should speedily make it the best supported of voluntary hospitals. There is a growing feeling in the medical profession that it is wrong for a great commercial emporium to give a relatively small subscription to a voluntary hospital, and then to claim in-patient accommodation free of all cost for every one of its employees who may need such accommodation in the course of each

year. Middlesex Hospital might well adopt the plan which has proved successful with the few hospitals which have tried it, of rendering an account each year to the employer setting forth the actual cost to the hospital of the treatment of their employees, the actual subscriptions received from such firms, and the amount due to the hospital from those firms, as represented by the difference between these two sums. We believe that if the Middlesex Hospital authorities were to appoint an Economy and Finance Committee to go fully into this matter, and to work such a scheme thoroughly, they would find that the huge difference of £10,000 a year, by which their total ordinary expenditure exceeded their total ordinary income in 1906, would speedily disappear. Meanwhile it is satisfactory to note that the Committee are able to claim from the work of the Economic Committee that extensive economies have recently been effected which must reduce the cost per bed very materially.

St. Mary's Hospital.

ST. MARY'S HOSPITAL is the great general hospital of West London, and for this reason it should command a large income from the wealthier residents of the metropolis. Annual subscriptions are the backbone of voluntary hospital finance. One test of the efficiency of the management in the case of St. Mary's Hospital in the circumstances named must be the actual sum received each year from subscriptions. The average number of beds daily occupied in 1906 at the Middlesex Hospital was 266.5, and at St. Mary's Hospital 253.2. The amount received in annual subscriptions by the Middlesex Hospital was £2,871, and by St. Mary's Hospital £5,018. These figures show that the business management of St. Mary's Hospital in this respect is good. Yet the support received from West London by St. Mary's Hospital is at present so inadequate that the Clarence Wing, recently erected with accommodation for 60 beds, remains unfurnished and unoccupied, although we can find no allusion to this fact in the annual report just issued. But the hospital authorities state that they are compelled to deny admission daily to poor sick people living in the district, owing to an insufficiency of beds. We feel this state of things to be one of the most serious facts in the hospital situation this year, and we venture to hope that the managers will actively exert themselves, for then we have little doubt that all the money needed will be forthcoming from the great wealthy population to be found within a three miles radius of St. Mary's Hospital. At the present moment economy is the one feature which hospital supporters regard with the closest attention, and St. Mary's Hospital claims that the average cost per occupied bed—under £84—is almost the lowest among the general hospitals of London. This one fact, if driven home with sufficient reiteration and energy, should produce all the money needed to bring the sixty unoccupied beds into use, and to place St. Mary's Hospital once and for all in a strong financial position.

A HUNGARIAN HEALTH RESORT.

THE MUD-BATHS OF PÖSTYEN.

HUNGARY is the land of the *cur* as well as the *csardas*. Here Nature has provided cures for well-nigh every ill that flesh is heir to, and the invalid in search of health may sample baths of all sorts—hot springs of sulphur, iron, magnesia, alum, mud—baths ranging from those of primitive simplicity known only to wanderers in the valleys of the Carpathians, to the renowned water of Hercules in Southern Hungary or the Kaiserbad of Buda-Pesth.

In search of pleasure rather than of a cure, we were guided to Pöstyen's miraculous mud-baths by effective posters displayed at the railway stations and showing a nude giant standing on a rocky height and casting away a crutch which, apparently, a course of Pöstyen treatment had rendered superfluous. We consulted Baedeker and discovered that this Hungarian Lourdes was less than four hours by rail from Buda-Pesth, and about the same distance from Vienna; that the baths belonged to Count Erdödy; and that as long ago as 1599 they were known to the Turkish invaders of Hungary.

So one evening when the sun was setting on the beautiful blue Carpathians and gilding the waters of the River Waag



we were jolted in the omnibus over the long ill-kept road that leads from the railway station to the little town that has grown up around the baths. The market-place, with its open stalls and groups of peasants in picturesque costumes, the queer little shops with stores of peasant embroideries, and the typically Magyar character and colour of the place, promised ample material for pen and pencil.

THE PATRONS OF PÖSTYEN.

Though it was late September and the summer season was well-nigh over, there were many victims of gout and rheumatism and other ills tottering about the streets and parks on crutches which they hoped to bequeath on their departure to the little museum of be-ribboned mementoes which we saw later in the entrance to one of the bath-houses. Most of the visitors were Hungarians, but a sprinkling of Austrians, Bohemians, Germans, and some of the many minor races that dwell in Hungary made up a polyglot company. Now and then, we were told, an English or American visitor will find his way to Pöstyen, following the example of the late Sir Spencer Wells, who, struck by a cure the Pöstyen mud had effected on the wounded hand of a Viennese surgeon of his acquaintance, visited the place after a meeting of the Hygienic Congress at Vienna which he had been attending. Having sampled the baths, Sir Spencer prophesied that one

day Pöstyen would become a formidable rival to Vichy, Homburg, Carlsbad, and other well-known spas. But that day has not yet come, and we found the place delightfully free from the tourist element.

The bath-houses are built on a picturesque little island in the middle of the River Waag, amid shady beech groves where white peacocks, indigenous to the place, add a beauty to the scene. On the bridge and all about in the leafy avenues, as we made the tour of the baths with Herr Winter, the director, we came on invalids driving in quaint little carriages something between a rickshaw and a sedan chair, each drawn by a sturdy barefoot peasant man or woman in the picturesque costume of the district, the men in wide-linen trousers and tunics, the women in short accordion-pleated skirts, blue aprons, and white short-sleeved bodices. Each villa has its own equipment of these little carriages and of "Infanterists," as the peasants who draw them are called.

A SLIDING SCALE FOR PATIENTS.

Provision is made for all classes, the poor peasant being able to have his bath of hot sulphur water or mud at certain hours for a few pence, while in the luxurious new "Franz-Josef bath-house" royal visitors are catered for in a special "Princes' bath," which has already earned its name from visits of Prince Ferdinand of Bulgaria, Princess Pauline of Wurtemberg, and other royal sufferers from gout or rheumatism. There are "Spiegel" or mirror baths for men only, others for ladies, and one for mixed bathing, besides innumerable separate baths fitted, some with wooden tubs, others with marble tanks, and many with duplicate bath-tubs, one for the hot mud, the other for the subsequent immersion in hot sulphur water. A bath costs from 1½ to 7 crowns (1s. 3d. to 6s. 5d.), according to the hour and class of bath. The new bath-house boasts a fine swimming-bath decorated in Moorish style, and the use of peasant embroideries in the *portières* adds an artistic charm to a mud-bath in their neighbourhood. All the baths are fitted with double supply pipes, one for the water at 60 degrees centigrade—its temperature when it is drawn from the river—the other for the same water artificially cooled in accordance with the doctor's instructions. That the mud which the bare-legged men in blue tunics were drawing from beneath the cool surface-waters of the river was hot and not merely tepid we proved for ourselves by dipping our fingers into a panful as it was drawn up. It was like hot porridge, and the water, smelling strongly of sulphur, which we sampled in the well-house later came up so hot that it needed a dash of cold water before we could sip it. Recently the hot mud has been found to contain radium, and this discovery may bring about the fulfilment of Sir Spencer Wells's prophecy and make the place a Mecca of modern medicine. Meanwhile it certainly seems to work wonders for those who suffer from any form of rheumatism, gout, neuralgia, sciatica, and lumbago. We could see patients growing daily more independent of their crutches, and a Hungarian officer whom we met told us he had come there a helpless cripple, and after five weeks' treatment was quite cured and was staying on for pleasure. There is, by the way, special provision in a military institute for officers both of the Hungarian and the Austrian armies, and a variety of gay uniforms mingled in the crowd that mustered in the park to listen to the gipsy band, without which no Hungarian open-air resort is complete.

THE MUD-BATHS.

Curiosity made us sample the mud-baths, and we were thus initiated into rites that involved the services of a couple of blue-bloused Hungarians, who brought the hot mud to

our cabins in wooden creels, swung on poles, and of a buxom bath-woman who, wrapping us in blankets, left us to soak our limbs in the mud for twenty minutes, timing herself by a "facing both ways" alarm clock, which brought her to the minute to supervise the later stages of the ceremony. These included a plunge in hot sulphur water, a rub-down with warm linen, and a siesta on a couch in our respective cabins. Perspiration plays its part in the cure, and our resolve to walk home instead of taking a rickshaw caused consternation to our bath-lady, and doubtless branded us in her esteem as "mad Angols."

A casino in the park, with reading-room, library, music-rooms, and summer theatre, provides the usual amusements of spa life. But our favourite entertainment was to saunter about the little town studying peasant life and buying peasant embroideries, worked in winter by the women of the district when field work ceases. Every day would bring its own picture—now a religious procession of half a mile or so of flower-crowned girls, each with a lighted taper, chanting hymns, on their way to some shrine; another day a string of wagons overflowing with peasants, all in red and russet, singing gaily on their way to some hillside vintage. Sundays and *fête* days brought out the peasants in wonderful gala dress to the wayside inns to dance the *csardas* to their own wonderful music or to polka to the tune of "John Brown's

Body" or the last American cake-walk played by gipsy fiddlers brown as berries. The colours that blazed in the kerchiefs and hair-ribbons, the bodices and aprons and short pleated skirts, were suggestive of a broken rainbow. And always for background were the distant Carpathian mountains and the fascinating River Waag, with the great timber rafts rushing down stream, and on the banks women wading knee-deep to wash their linen à l'écossoise.

WHERE TO STAY.

Besides modest hotels, where board may be had for as little as five crowns (4s. 7d.) a day, and villas with pleasant gardens, such as the villa reherek, where we were comfortably quartered, there is in the Cur Park itself a resplendent new hotel, the Grand Hotel Ronai, which in comfort and elegance can vie with the Carlton or the Ritz. Steam-heated, with electric-light, a motor omnibus, an excellent cuisine, and balconies commanding beautiful views of the mountains and river, this hotel may do more than anything else to bring English and American visitors to the Hungarian Lourdes, and so fulfil the prophecy of Sir Spencer Wells, who saw in Pöstyén a fine field for some enterprising financier or syndicate with the capital needed to develop its resources and make its miracle-working mud-springs known to the whole world.

KING EDWARD'S HOSPITAL FUND.

THE *Times* reports that the Bill for the incorporation of King Edward's Hospital Fund for London, which has passed through all its stages in the House of Lords, was considered on the 30th ult. by the Select Committee of the House of Commons on Unopposed Bills, Mr. Emmott in the chair.

Mr. Cameron, Parliamentary agent, stated that the Bill emanated from his Royal Highness the Prince of Wales, with the express approval and sanction of his Majesty the King. The object of the Bill was to incorporate the president, who was the Prince of Wales, and General Council of the Hospital Fund, and to provide for the management of the fund. The General Council acted as an advisory committee to the president, but all the money was vested in the Prince of Wales, who had absolute control of the funds.

In reply to Sir Chandos Leigh, the Speaker's counsel, Mr. Cameron, said the object sought to be attained by the Bill could not have been achieved by a charter, and, moreover, the King had a decided objection to a charter, as his Majesty did not think that was a proper method of bringing the matter forward. Replying to questions by the committee, Mr. Cameron stated that the subscribers had not been called together and consulted with regard to the proposed incorporation—that was an impossibility, having regard to the number of subscribers—but the Bill had been submitted to the council and unanimously approved by them. What the Bill did was to give statutory form to the method of administration which had existed since the fund was established in 1897.

Mr. Caldwell (of the committee) took strong exception to the whole management of the fund, which now amounted to over £1,000,000, being given to one person; and when Mr. Cameron replied that this was a case of the administration of a trust which had been confided to the Prince of Wales, the Chairman pointed out that the Bill gave the same power to future presidents, Mr. Beale (of the committee) adding that the president was irremovable.

It was pointed out in the course of a long discussion, by

Sir Savile Crossley, M.P., one of the hon. secretaries of the Fund, Sir Chandos Leigh, and Mr. Cameron, that, as the Bill was originally drafted, the appointment of president was left to the nomination of the King. In the House of Lords, however, this provision was modified so as to secure that future presidents could only be appointed on the recommendation of the Lord Chancellor, the Prime Minister, and the Governor of the Bank of England, and that they were to hold office only during the pleasure of the Sovereign.

Sir Savile Crossley asked whether the committee could suggest any better method of selecting the president.

The Chairman said he was quite satisfied with the method of selection for future presidents, but the difficulty that was pressing on his mind was this. It might not always be possible to have a person who would enjoy the same measure of public confidence as the present President. There might not be such a person to be got at times, and, in these circumstances, was it wise to give all these powers to future presidents? It occurred to him whether these exceptional powers might not be maintained for the present president, but that the same powers should not be enjoyed by future presidents?

The same view was expressed by Mr. Beale and Mr. Crombie (of the committee), and Mr. Caldwell said that, now that the fund had grown to such an extent, it should be put on a wider basis, and there should be less of that personal control which was, perhaps, necessary at the inception of the fund.

Sir Savile Crossley said it was only right to say that the Prince of Wales had given an immense amount of time and work to the fund, and that it had been the effort of his Royal Highness to bring in, and to take into confidence, as far as possible, all those who were interested in the London hospitals and had shown a willingness to help in the matter.

The Chairman said the promoters of the Bill now knew the character of the committee's doubts on the subject; and they would adjourn the further consideration of the measure until their next meeting (Thursday, June 13, 1907).

NEWS AND COMING EVENTS.

It is proposed to re-establish a children's ward in Addenbrooke's Hospital, Cambridge.

In response to the appeal for £18,000 made by the committee of the Bristol General Hospital, a sum of £13,000 has already been subscribed.

A BALL will be given at the Grafton Galleries on Waterloo Day, June 18, under the patronage of Princess Louise, Duchess of Argyll, in aid of the funds of the Royal Waterloo Hospital.

In 1902 Lord Mount Stephen, with a view to increasing the endowment of the Royal Infirmary at Aberdeen, presented it with securities yielding an annual income of £1,000. He has now given a further donation of £10,000 towards the funds of the institution.

The new wing and operating-theatre at the West Cornwall Miners' and Women's Hospital, Redruth, has been opened. The new building stands between the two wards of the old hospital, and is approached from both by a broad corridor. The walls and ceilings are of adamant cement, finished with parapan paint. The theatre is fitted with the most modern appliances, and is in every way suited to its purpose.

The degree of Doctor of Medicine has been conferred upon Dr. Wilfred T. Grenfell, C.M.G., by the University of Oxford, *honoris causa*, at a convocation on May 28, in recognition of the splendid work he has achieved in improving the social condition of the Labrador fisherfolk. The honour bestowed upon him by his old University is all the more marked by reason of its being the first honorary M.D. degree conferred at Oxford.

MEDICAL men who have had the privilege of studying in Paris will be interested to know that the English pupils of the late M. Alexandre Beljame, for many years Professor of English at the Sorbonne, intend to raise a fund to perpetuate his memory by the erection of a marble tablet in his lecture-room. The professor was well known to English medical students, to whom he endeared himself by his courtesy and kindness. The secretaries of the fund are M. Clermont, of the Lycée de Saisy, and Mlle. Scott, of the Lycée Molière.

LONDON SCHOOL OF CLINICAL MEDICINE ("DREADNOUGHT" HOSPITAL, GREENWICH).—The following is the programme for the summer session: Monday, Medicine, Sir Dyce Duckworth, 2.15 P.M.; Surgery, Mr. William Turner, 3.15 P.M.; Throat and Ear, Dr. St. Clair Thomson, 4 P.M. Tuesday, Medicine, Dr. R. Tanner Hewlett, 2.15 P.M.; Surgery, Mr. Carless, 2.15 P.M.; Diseases of the Skin, Mr. Malcolm Morris, 4 P.M. Wednesday, Medicine, Dr. Frederick Taylor, 2.15 P.M.; Ophthalmology, Mr. Cargill, 3.30 P.M. Thursday, Medicine, Dr. Guthrie Rankin, 2.30 P.M.; Surgery, Sir William Bennett, 3.15 P.M.; Radiography, Mr. Mackenzie Davidson, 4 P.M. Friday, Medicine, Dr. Rose Bradford, 2.15 P.M.; Surgery, Mr. McGavin, 3.15 P.M. Operations each day at 2.30. Out-patient Demonstrations: Surgical, daily, 10 A.M.; Medical, daily, 10 A.M.; Ears and Throats, Mondays and Thursdays, 12 A.M.; Eyes, Wednesdays and Saturdays, 11 A.M.; Skins, Tuesdays and Fridays, 12 A.M. Special Lectures: June 10, (Monday), Mr. Wm. Turner, "Empyema"; Wednesday, June 12, Dr. F. Taylor, "Diagnosis of Typhoid Fever."

The Wagga-Wagga Hospital, N.S.W., has started a re-building scheme which will cost £8,000. Towards this the Government has given £3,000, and some £2,000 has been subscribed locally. The hospital treats 800 patients annually, and its accommodation is very limited. At least 32 additional beds are necessary.

The plague mortality in the Punjab is rising by about a thousand a week, and is more than ten times as heavy as it was at this time last year. The following is the official statement of deaths reported from plague during the week ending February 16: Total for the province, 9,237; total for the previous week, 8,110; total for the corresponding week of the previous year, 873.

EDITOR'S LETTER-BOX.

[Our Correspondents are reminded that prolixity is a real bar to publication, and that brevity of style and conciseness of statement greatly facilitate early insertion.]

MEDICAL TITLES.

SIR,—All honour to those who have obtained the M.D. London. Unfortunately, the title of doctor has both a popular and academic significance; the former being well grounded in popular usage.

Further, the public service competitive examinations testify to the high standard of efficiency attained by London licentiates and members. England is inundated with Scotch, Irish, and provincial graduates, M.B.s and M.D.s, all styling themselves doctor, and so it becomes a hardship that English qualified practitioners should be debarred from using the title conferred upon them by conventional usage. Yours truly,

FREDERICK W. COLLINGWOOD
(L.R.C.P.Lond., M.R.C.S.Eng.).

Denehurst, Acton Hill, W., June 1.

THE ABUSE OF HOSPITALS BY INDUSTRIAL FIRMS.

SIR,—The modern practice of large industrial firms making a small annual payment to local hospitals, and in return for the same their well-paid employees receiving gratuitous surgical aid in case of trivial or semi-trivial accidents, is, I submit, a great mischief and grievance to practitioners who are willing to render good work for moderate fees. For if these well-paid employees are deemed fit objects of charity, the expense thereof should be borne by these wealthy firms, and members of the profession should not be exploited in this manner. Yours faithfully,

FREDK. W. COLLINGWOOD.

Primrose Club, Park Place, W., May 31.

THE LEGAL STATUS OF HOSPITAL-TRAINED NURSES.

DEAR SIR,—I shall be obliged if you can inform me where I can obtain a book on the legal status of hospital-trained and certificated nurses and of their legal responsibilities to the public. I do not mean those under the Midwives Act. Thanking you in anticipation. Yours faithfully,

HERBERT W. G. MACLEOD.

17 Upper Wimpole Street, W., May 31.

[The book entitled "How to Become a Nurse; the Nursing Profession, how and where to Train" (Scientific Press), contains a chapter on the principal laws affecting nurses.—ED. THE HOSPITAL.]

NURSING ADMINISTRATION.

PROGRESS IN DISTRICT NURSING.

THERE is no more hopeful sign for rural England than the continuous spread of district nursing throughout the country. It is a movement which extends its influence far beyond the sick poor for whose relief it was in the first instance designed. It is not only a source of untold comfort to the sick folk who for want of tendance have hitherto suffered miserably and hopelessly in their own cottages, but also an educative force the full value of which is even now scarcely appreciated except by those who have followed its developments. Reinforced by the midwifery which now forms a part of almost every district nurse's qualifications, it is likely to have a permanent effect on the unborn race, and to introduce wholesome methods of child rearing to combat the old superstitions which have lingered in remote country regions, to the destruction of countless thousands of future citizens. It is bringing the powers of gentle persuasiveness and gentle rebuke to bear against dirt, airlessness, and unconscious cruelty, and among the younger women its effects are already conspicuous in many neighbourhoods in an improved standard of living, and higher ideals of conduct. But the value of district nursing does not end here. It is a bond of union between rich and poor to an extent to which the old district visitor system never attained, much as the country owes to these untrained workers. There are many country districts where the nursing association has brought into being a public spirit and power of co-operating for the common good hitherto unknown. The astonishing result is that even districts where influential support is conspicuously lacking find themselves capable of meeting the heavy annual charges connected with the provision of a trained nurse. The enthusiasm of the poor goes hand in hand with that of the middle classes, and the desire to possess a nurse once awakened in a neighbourhood works irresistibly until the aim is accomplished.

The recent report of the Queen Victoria's Jubilee Institute for Nurses should do much to quicken the cause of district nursing throughout the country. One most important pronouncement has removed a serious impediment from the progress of village nursing—namely, that the statistics "tend decidedly to show that midwifery and non-infectious nursing may be combined with safety by Queen's nurses, or the village nurses of the Institute." So long as this point was in abeyance the village nurse was in a position of considerable difficulty. It was impossible that each village could maintain two nurses, or even that work sufficient for a nurse could be found in small neighbourhoods unless midwifery and the non-infectious cases of general nursing were combined. That the precautions enjoined on the midwives whose duties bring them sometimes into contact with septic cases have proved a sufficient safeguard, is matter for congratulation to those responsible for framing the regulations, and is a tribute to the success of the Midwives Act, which has rendered possible the enforcement of exact rules.

The Institute is doing much by taking the village nurse under its aegis through the medium of the county associations. The policy of ignoring the less highly trained nurse seemed at one time likely to be disastrous for the future of nursing, but already much has been done by the introduction into the too short period of training, which is often all that is available, of sound methods, and by regular inspection, to render the village nurse a valuable link in the chain of aid to the sick poor all over the country.

THE VILLAGE NURSE.

It would appear now to be only a question of time before the nurse becomes as essential a part of town and country life as the doctor or the parson. Only want of funds stands in the way of her presence in sparsely populated districts, and this, as we have said, is a difficulty which tends to disappear as the want begins to press. The step which is being taken by many Boards of Guardians in making grants for the nursing of the sick poor in their own homes in place of removing them to the workhouse or Poor-law infirmary is likely to become very general as the full extent of the saving effected through the medium of the district nurses is grasped. And would it not be possible for Parish Councils also to vote grants in poor districts for this purpose?

THE MIDWIFE UNDER THE NEW ACT.

The position as regards village nursing will shortly be changed by the disappearance of the *bona fide* midwife, under the regulations of the Midwives Act in 1910. The condition of affairs as regards rural midwifery is grave in the extreme. Few, indeed, are the counties in which any adequate preparation for 1910 is taking place. It is quite hopeless in the present condition of affairs to expect that midwifery in country districts can be undertaken in accordance with the ordinary laws of supply and demand. The magnitude of the task can be best appreciated by contrasting the population of Great Britain, as ascertained at the last census, with the number of nurses available for the service of the poor. In connection with the Jubilee Institute there were on December 31, 1906, a total number of 2,190, including Queen's nurses, probationers, village nurses, and midwives. There are probably as many more district nurses working for associations not affiliated to the Institute. Whereas to complete the nursing service the best authorities agree there should be at the very least one nurse to every 2,000 persons.

Under the present system there are many places without a nurse, which are perfectly able to cope with the necessary expense. We believe these would be much fewer if only the need were brought clearly home to the inhabitants. Could not the Jubilee Institute prepare a Report from the knowledge at their disposal stating the requirements of each county? The organisation is in their hands, and it is to them that the country looks to deal with the matter as a whole.

THE COMMON TASK.

Correspondence and Queries for this section should be sent to the Editor of THE HOSPITAL, 28 Southampton Street, Strand, London, and marked "Nursing Administration."

CLEAN MILK.

THE plan adopted by the Cardiff Infirmary to ensure a pure milk supply is worthy of imitation. The form of tender lays down as a condition that the cows shall be examined and reported on by a veterinary surgeon selected by the Infirmary, and the cows thus passed as free from disease shall be the only ones whose milk shall be sent to the Infirmary. The dealer shall undertake to wash the udders of the cows with soap and water just before milking the animals, and shall further undertake to see that those who milk the cows shall wash their hands immediately before milking. The cows shall be milked in a place free from manure and dirt. The milk is to be strained and cooled to at least 50° F. immediately after milking, and then placed in churns belonging to the Infirmary, which shall be at once locked down, and the milk conveyed to the Infirmary without delay. All this is excellent, and the right of inspection being also secured, the Cardiff Infirmary must be able to feel tolerably secure about the cleanliness of their milk, due precautions being taken also to ensure that its constituent qualities are satisfactory. It would be interesting to know how long milk supplied under these favourable conditions will keep sweet in a cool dairy.

ENTRANCE FEES FOR PROBATIONERS.

Small premiums of a guinea or so for probationers are found, it appears, very useful in freeing the hospital from enterprising ladies who are seized with a desire to see what nursing is like, but have no real intention of ever remaining to complete their course. Some provincial hospitals are much plagued with these restless persons, and even a small fee does much to prevent the hospital from being used as a convenient spot in which to get a change of ideas, and a relief for a few weeks from the monotony of home life.

THE PAYING WARD AS A FACTOR IN TRAINING.

In hospitals of such size that probationers cannot possibly expect to get experience in all the wards in the course of their three years' training, the paying wards are a valuable part of the building. It is

not merely that the conditions approximate more nearly to those obtaining in private nursing than can be the case in the general wards, but the variety of cases found side by side, unsorted, if the expression may be permitted, gives the probationer a more general idea of both surgical and medical work than is possible in wards devoted entirely to one particular section of the body. It may almost be asserted that the probationer who is fortunate enough to spend her third year at Guy's in the Bright Ward gets a complete education in nursing irrespective of her previous experience. For here, and indeed in most paying wards in modern hospitals, there is a private theatre, and thus the privilege of experience in a branch of work which cannot possibly in a large hospital be accorded to all, is added to her general duties. The difference in nursing in the pay wards as contrasted with that in the ordinary part of the hospital resolves itself mainly into a difference in the service of meals, the private patients getting trays where the ordinary patients get plates. But the divisions of the ward into cubicles, which prevents the nurse from keeping it all under observation at the same time, renders more hands necessary, and keeps the staff perpetually busy. This is hardly more of an addition to the responsibilities of the ward sister, however, than the balcony system, under which a good section of the beds are removed from immediate observation. If for no other reason than for helping to rid the nursing staff of routine, the provision of paying wards in general hospitals ought to be welcome.

INSTRUCTION IN INSTITUTION MANAGEMENT.

A complaint comes from America that superintendents of nurses have no facilities afforded them of acquiring knowledge of their administrative duties before taking up responsible posts. It is idle, however, to advocate the establishment of schools for superintendents. There can be no way of learning the secrets of a good administrator except by doing the work, and although much may be learned by serving as assistants the real difficulties of the head of a department can never be gauged except by one who holds a similar post.

THE BEST NATURAL APERIENT WATER.

Hunyadi János

For CONSTIPATION.

Professor D. LAMBL, of Warsaw, Professor of Clinical Medicine at the University, writes—

"Hunyadi János Bitter Water, besides being an excellent general aperient, has proved specially efficacious in the treatment of chronic constipation, venous obstruction and congestion, hæmorrhoids and obesity.

AVERAGE DOSE.—A wineglassful before breakfast, either pure or diluted with a similar quantity of hot or cold water.

CAUTION.—Note the name "Hunyadi János," the signature of the Proprietor, ANDREAS SAXLEHNER, and the Medallion, on the Red Centre Part of the Label.

The Hospital

A JOURNAL OF

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SATURDAY, JULY 6, 1907.

THE NOTIFICATION OF BIRTHS BILL.

THE Notification of Births Bill, though it will probably not become law during the present Session, has reached a stage which shows that its principles commend themselves to the present House of Commons. We have nothing to say here on the general motives and objects of the Bill, and, indeed, for our present argument, we are willing to allow that these are in the highest degree excellent. But it is necessary to observe that certain provisions of the Bill touch the duties and responsibilities of the medical profession very closely, and we venture to say that these provisions are not only unjust to the profession, but also in the highest degree inexpedient in the public interest. It may be well and wise that every birth shall be formally notified to the authorities within thirty-six hours of its occurrence. But we claim that such notification is not, and ought not to be made, the duty of the medical profession. As it stands at present, the Bill demands that the father of the child, if he is residing in the house at the time of birth, shall within thirty-six hours give notice of the event in writing to the local authorities concerned. But exactly the same duty is imposed "upon any person in attendance upon the mother at the time or within six hours after the birth." And this in practice will in a great many instances mean the medical practitioner in charge of the case. This conclusion is confirmed by what has happened under the Notification of Infectious Diseases Act. There, while both the doctor and the head of the house have an equal liability, it has come about that the duty is left entirely to the doctor. And this experience will doubtless repeat itself should the Bill here discussed become law.

Now it is necessary to state clearly what are the objections entertained by the medical profession to the proposed procedure. The most radical and important of these is, that what the Bill demands is an invasion of the confidence which exists, and which it is in the public interest should exist, between a medical practitioner and his patient.

The proposal is nothing less than an attempt to make the practitioner, who is called as the private adviser of the patient, an agent and officer of the law. He is engaged, and receives his fee, on behalf of the interests of an individual citizen, yet he is to be compelled by Parliament to adopt and discharge a public function. We hold this to be an unfair demand and a vicious policy. It is in the best interests of the community that the citizens shall regard the confidences they place in their medical advisers as utterly sacred and secure. Whatever undermines this trust is prejudicial to medical practice, and is injurious to the public interest. Hence a proposal which compels a medical practitioner to hasten from his patient's bedside to inform a public official of what has transpired in the sick-room, is to be vigorously condemned and firmly resisted. We are not, let it be noted, contending that the State should not receive this information. That is as it may be. Our claim is that it has no right to force the medical practitioner, the patient's private adviser, to be the informant. And this, first because it compels a breach of professional confidence and so weakens the sanctity of the relations between doctor and patient, and, secondly, because it places upon a private practitioner, public activities which are not part of, and may be inconsistent with, his duty to his patient.

To what has just been said it may be objected that the profession already discharges under the Notification of Infectious Diseases Act similar functions to those demanded in the new Bill. This is perfectly true, but these functions are discharged under the compulsion of the law. The medical profession has now no choice in the matter. Some of us raised objection when the proposal was first made, and have continued the protest as opportunity has offered. Possibly, if a determined opposition had been offered when compulsory notification was first suggested the policy would not have been adopted, and the present natural development of it would not have taken place. We have just the same objec-

tions to the direct notification of infectious diseases by the private medical adviser of the patient as we have to the notification of births by the same agent. Both the one and the other involve a failure to recognise and respect a relationship which should be treated as sacred. But because we are already compelled by law to injure this relationship in one set of circumstances, that is no reason why we should quietly acquiesce in a still further invasion. There is an additional point of interest, and those who accepted, more or less readily, the first demand may note its significance. When members of the profession some years ago were

called upon to reveal to public officials information which they had gained in their capacity as private medical advisers, the law acknowledged the proceeding by the payment of a modest fee. Now a similar demand is advanced in regard to the notification of births and no such financial recognition is suggested. Such is the natural consequence of departure from principle. The fee, however, is but a trivial comment. Fee or no fee, we hold the provisions of the Bill now before Parliament in so far as they compel notification of births by private medical practitioners to be definitely opposed to the public interest.

LORD LISTER IN THE CITY.

THE Corporation of the City of London has on divers occasions honoured great men by granting them the privileges which belong to the honorary Freemen of the City, but it is questionable whether it has ever acknowledged eminence more worthily or showed its appreciation of genius more happily than when on Friday last it presented that distinction to Lord Lister. The list of honorary Freemen of London is a long one. It includes monarchs and untitled men, but it holds no name that is unworthy to be placed on the roll of the real nobility of the nation. The inclusion in that list of the name of one who has done so much for medical science, and whose work has opened a new era in the history of the art of surgery, reflects as much honour on the Corporation as it does upon Lord Lister.

The presentation was made at the Guildhall by the City Chamberlain, Sir Joseph Dimsdale, who, in presenting Lord Lister with the casket, and in extending to him the right hand of fellowship, briefly and felicitously touched upon the achievements which have made the name of Lister venerated, not only by medical men, but by the laity, who recognise the greatness of the master's work. That name, indeed, as the City Chamberlain rightly said, needs neither embellishment nor the sculptor's art to perpetuate it to posterity. "The work which it has been my great privilege to be engaged in has brought its own all-sufficient reward" was the new Freeman's reply in thanking the Corporation; and everyone must recognise the truth of this statement, made with such modesty and dignity. The time has passed when antisepsis and asepsis were of the nature of party politics in medicine. For a long time the work, that to-day stands beyond the pale of adverse criticism, was neglected, slighted, even scoffed at. To be slighted, misunderstood, wrongly interpreted, and adversely criticised has never yet discouraged the true searcher after truth. More often such

stumbling-blocks in the way of universal appreciation and grateful recognition have spurred on the investigators to more earnest and energetic efforts, and in Lord Lister's case they have been productive of the usual results. To-day the work, begun almost half a century ago, which was to leave so enduring an impression upon the science of medicine, has received spontaneous and general recognition. Not only in England, but on the Continent as well, the epoch-making advances in regional surgery and the general progress in the evolution of medicine are considered to be indebted to that work to an extent which only the future historian, adequately and impartially judging the whole, will be able correctly to estimate. To-day, when the carbolic spray is an anachronism and the opponents of Listerism are confined to a small class of selfish men and women, who in their regard for the rights of animals forget the claims of humanity, there is a unanimity of opinion as to the excellence of Lister's work which, to a great man, must indeed be an all-sufficient reward.

The honour which the City of London has done to Lord Lister is in every sense the expression of the nation's sentiment of appreciation for a great service to humanity performed by a great personality. But we do not think that it can, in any sense of the word, be regarded as placing "a coping-stone to the monument" of his fame. The mere granting of civic honours is not an adequate remuneration for a life-work of such brilliancy and merit. We do not doubt that the time will come when the nation, as a whole, will join in expressing its appreciation in a still more tangible form. Lord Lister's work is not merely national; it is not even merely Imperial. It is work that appeals to the whole of humanity without distinction of race or interest. It must indeed be gratifying to find that it is appreciated by the whole world as cordially and as heartily as it has been appreciated by the Corporation of the City of London.

ANNOTATIONS.

Sir William Collins, M.D., M.P.

THERE never was a time in the history of medicine when the profession stood in greater need of an educated, resolute, strong mind to voice its affairs and represent it worthily in Parliament. It has been well said that, if a man possess character, education, and fearlessness in the maintenance of his opinions and the enforcement of the principles in which he believes, there is no position in the country which may not be open to him. One of the most honourable offices in connection with British universities is that of Vice-Chancellor of the London University. The constitution of the London University, the esteem in which its degrees are held as tests of knowledge and ability, and the independence and thoroughness of its senate, all combine to make the vice-chancellorship a high appointment of great authority. We heartily congratulate Sir William Collins, M.P., upon his acceptance of this office. He took his degrees with honours, and won the gold medal in public health in 1887. Sir William has done excellent work as a Fellow and Senator, and his public services as chairman of the London Education Committee were exceptionally great. As chairman of the London County Council he won golden opinions, and his election to the House of Commons conferred honour on the constituency which he represents. We have had considerable personal experience of Sir William Collins' marked ability, judgment and character in the discharge of public business, and we look forward to the time when he may render yet more important service not only to the profession, but to the country, by being selected as a member of a Liberal Cabinet. Sir William's record proves him to be a man who would bring strength to any Ministry he may join, not only from his personal qualities, but because of the robustness of his character, and his power to present his subject with a terse directness sure to command attention. The Senate of London University is to be congratulated upon its choice of a vice-chancellor, whilst Sir William Collins' election is a just tribute to his ability, and to his university and public record.

Special Hospitals and their Visiting Staffs.

IN our issue of the 15th ultimo, p. 274, we laid stress on the fact that special hospitals have greatly improved of late years, and that many members of their visiting staffs in London are amongst the best qualified and most honourable men in the profession. We are glad to emphasise this opinion by recording the results which have followed Mr. Francis Roe's letter, calling in question the conduct of a member of the visiting staff of a special hospital, the details of which we have already published. Mr. Francis Roe, it was fair to presume, had satisfied himself as to the accuracy of the statements made over his signature in the letter in question. It would appear, however, as if Mr. Roe had first made the charges and then investigated them, for he now writes: "I find that the facts were not as alleged, and therefore that my inferences were not correct. I have since seen the member of the

staff of the hospital referred to, and, after hearing his clear statement as to what really occurred, I have no hesitation in publicly withdrawing the letter which I wrote, and asking him to accept my *amende honorable* for having written it." This letter is dated 26th ultimo, and we could have wished that Mr. Roe had more closely tested his facts before writing at all on a matter of profound importance not only to special hospitals and their visiting staffs but to the public at large. We are glad to know that the charges made, after full investigation, have been withdrawn, a fact from which it may fairly be held that the present administration of special hospitals in London is infinitely better than it was. Special hospitals have had a material influence for good upon the treatment of disease, and the relief of suffering humanity. The best of them fulfil a very useful purpose, and we congratulate all concerned that prompt action has secured a full refutation of the charges published by Mr. Francis Roe.

The late Sir William Tennant Gairdner, K.C.B.

IT is with sincere and profound regret that we record the death of Sir Wm. Tennant Gairdner. In him there passes away one of the great figures of the medical profession. A great physician and a good man is no more, and the world is indeed the poorer for the loss. For more than fifty years he was continuously engaged in the teaching and training of medical students, and it is in the lives and work of these men that his moral force and influence are most fully realised. Meet them where you will, their talk sooner or later comes round to the one topic, and is full of an affectionate reverence and tenderness for their old teacher. The measure of his professional achievements is much—it is to be found in his writings and in the sanitary history of the city where he lived and worked for well-nigh forty years. Much also might be said of the range of his knowledge, of his wide sympathies, and commanding ability. But it was something over and above these which placed him in the unique position he long occupied in the regard and judgment, not only of his juniors, but also of his compeers in the profession. The secret may perhaps be found in his character and personality. It was impossible to know Gairdner without becoming aware that he carried into everything with which he was concerned a sincerity and singleness of aim entirely beyond question, and that never was he moved by other than large and worthy motives—and this consistently and invariably, because, as it were, naturally and without effort. Add to this elevation of character, a certain simplicity of outlook and gentleness of spirit, and it is possible to get some measure of insight into the reverence and affection which Gairdner inspired. When, further, it is remembered that these mental and moral qualities were constantly exhibited in the class-room and the hospital ward as the natural attitude of the man towards his work and its various claims, it may be understood that to many Sir Wm. Gairdner was a source of inspiration not less than the object of a deep personal affection.

MEDICAL OPINION AND MOVEMENT.

It is one thing to get justification from the law, but quite another to obtain pecuniary compensation. This is evidenced in the case of Dr. Bagley at Manchester. Dr. Bagley was charged with obstructing and assaulting the police in the execution of their duty. He was called in to attend an old man of feeble intellect, who had attempted suicide by cutting his throat. The police insisted on taking him to the Ancoats Hospital, in spite of Dr. Bagley's statement that he was unfit for removal and could be tended and guarded at home. The magistrate decided that the police had no right to remove the man without a warrant, and the Chief Constable issued instructions that under such circumstances the police must act in accordance with the doctor's instructions. Although Dr. Bagley was in this way fully justified in his action, he incurred legal expenses to the extent of about £30 over the affair, and he applied to the Watch Committee for his costs. These have been refused, in spite of further representations on his behalf by the local Council of the British Medical Association. Apart from the magistrate's decision, the order of the Chief Constable is such a complete confession of error on the part of the police, that one would suppose some compensation would have been readily granted to the doctor to meet expenses incurred in carrying out his professional duties.

It is often difficult to obtain definite evidence of alcoholic excess in cases of failing heart, in which alcohol may be suspected as the cause on clinical grounds. Any clinical sign therefore which will aid the physician to draw his own independent conclusions is of considerable utility. Dr. R. T. Williamson, of Manchester, is of opinion that the loss of the tendo Achillis reflex affords such a sign. Of 21 cases of alcoholic heart failure he has found this reflex absent in 18 cases. He regards this sign as evidence of slight incipient neuritis, and points out that it is one of the first reflexes to disappear in such conditions. Only seven cases out of the 21 had absent knee-jerks, and these were among those with advanced symptoms of failing heart. In 100 cases of cardiac disease not due to alcoholism, only two showed absent tendo Achillis jerks, and in these the knee-jerks were also absent, and there was the Argyll-Robertson pupil. In considering the value of the absence of the tendo Achillis reflex in relation to alcoholic excess, other signs indicative of nerve lesions must of course be taken into account. Thus in both these cases there was aortic valvular disease, and the absent reflexes and Argyll-Robertson pupils were due to incipient tabes dorsalis.

The first part of the report on vital statistics for the decennial period, 1891-1900, prepared by Dr. Tatham, superintendent of statistics, and issued from the office of the Registrar-General for England and Wales, has just made its appearance. This is the fifth volume in succession, and therefore allows of a retrospect over a period of half a century. In such a retrospect the essential points of general interest are the comparative rates of births and deaths in

the successive periods. As pointed out by Dr. Tatham in his introductory letter, these figures must be considered together. Thus the apparent fall in the general death-rate is from 22.28 per 1,000 living in 1841-50 to 18.19 per 1,000 in 1891-1900. These figures do not, however, represent the actual diminution in death-rate. During this time the birth-rate has also fallen considerably, and such a fall materially modifies the age constitution of the population, and as the mortality-rate varies for the different ages, a corresponding change in the general death-rate results. According to Dr. Tatham's calculation with the same age constitution in 1841-50, as ruled in 1891-1900, the death-rate during the earlier period would have been 21.74 per 1,000, so that the actual fall in mortality is from 21.74 per 1,000 to 18.19 per 1,000. There has unfortunately been no such corresponding fall in infant mortality. Thus in 1891-1900 the death-rate at ages under one year was 181.2, which is the same figure as that for the period 1861-70. Comparison between the death-rates in country and urban districts show that it is the conditions of town life which are especially responsible for this maintenance of a high infant mortality.

An important experiment has been carried out by Dr. W. Fletcher in the Kuala Lumpur Lunatic Asylum in the Malay States to test the supposed causal relation between the incidence of the disease beri-beri and the use of uncured rice as a food. An epidemic of the disease broke out in the asylum in 1905, and out of 219 lunatics 94 were affected during the year, with a mortality of 27. Uncured rice formed the chief constituent of diet for the inmates. At the end of the year it was decided to place half the lunatics on cured rice—that is, rice that is stored after being boiled, and then husked. This system of feeding was continued throughout last year, and during that time out of 120 inmates fed on uncured rice 34 suffered from beri-beri, and 18 died; whereas among 123 patients fed on cured rice there were only two cases of beri-beri, both of whom were suffering from the disease on admission, and no deaths. The two batches of patients were kept in separate wards and fed at different times, and separate cooking and feeding utensils were used, but otherwise the patients were allowed to associate together, and at the half-year the two batches were changed over to each other's apartments. Ten of the patients living on uncured rice and suffering from beri-beri speedily recovered when transferred to the other side, and on the other hand, of four patients hitherto fed on cured rice, when changed over to the uncured rice, two developed the disease, and one died. These facts are not only important evidence in support of the supposition that uncured rice is in some way responsible for the occurrence of beri-beri, but they also go to disprove the theory of the disease being microbic and infective in character. What the causal relation actually is remains as yet unsolved; whether there is some poison in the rice, or some nutritive deficiency rendering the individual susceptible to the disease.

HOSPITAL CLINICS.

COMMON AFFECTIONS OF THE SKIN OF THE PERINÆUM AND ADJACENT PARTS.

By MALCOLM MORRIS, F.R.C.S. Ed., Dermatologist to King Edward VII. Hospital,
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I PROPOSE to-day to speak of common affections of the skin of the perinæum, the external genitals, the folds of the groins, and the buttocks, or more generally of what may be called the "bathing drawers area." That region presents a number of special features which modify the appearance and course of evolution of the lesions characteristic of various diseases which affect the integument. The skin of the perinæum presents the puckered ridge of the raphé, with the wrinkled contractile scrotum, while about the anus it is arranged in countless tiny folds radiating from the orifice, each of which may be the hiding-place of irritating secretion, dirt, or ulceration. Around the margin of the anus and on the scrotum the skin is deeply pigmented. Further, this region is exposed to an exceptional amount of irritation from sweating, and, unless the most scrupulous precautions are used, also from urine and particles of faecal matter. Added to these there is friction from clothes and from mutual chafing of surfaces in contact with each other in walking. Again, the presence of orifices (anus, vulva, meatus) at whose edges skin and mucous membrane meet, supplies conditions favourable for the development of certain diseases of the integument. The hairiness of the parts renders them peculiarly liable to invasion by micro-organisms, and the warmth and moisture of the region make it a kind of forcing-house for germs. Owing to these causes the diseases of the perinæum and adjacent parts require special treatment, or rather the special adaptation of ordinary remedies.

THE COMMONER SKIN AFFECTIONS.

I may say here that rare forms of disease, such as vegetating follicular psoro-spermosis, do not fall within the purview of these lectures. Some diseases of the skin peculiar to the tropics are, however, occasionally met with in this country in persons who have lived abroad, and these will require to be touched upon. But it is the commoner affections with which we are more especially concerned. Though most of them may be looked upon—by those who have never suffered from them—as comparatively trivial ailments, they are well worthy of the attention of practitioners. Though they do not as a rule threaten life, they cause an amount of bodily and mental misery quite out of proportion to their pathological importance. Moreover, there is no part of the body in which the diagnosis and treatment of tegumentary affections are more difficult.

The diseases to be discussed may be arranged roughly in their order of frequency as follows: Intertrigo, eczema, contagious impetigo, boils, scabies, pediculosis, psoriasis, lichen planus, ringworm, tinea versicolor, herpes, pruritus (anus, vagina, etc.), and syphilitic lesions.

GENERAL POINTS.

Examination.—First as to the examination of the patient. Lesions that supply the clue to the nature of the disease may easily be overlooked unless every fold, nook, and cranny is carefully explored. It is important, therefore, that the parts should be inspected in a good light. The examination should first be made from the front, special attention being directed to the folds of the groin; to the hypogastric folds if the patient be fat and to the genitals if there is any reason to suspect the presence of any lesion there. Next examine the back, the cleft between the nates, the perinæum, the anus, and if anything should point in these directions the penis or the vulva. Omission to make such a complete survey may lead to the point of origin of the disease remaining undetected. Critically examine whatever lesions may be present, differentiating the primary lesions characteristic of a given disease from those produced by scratching and secondary infection of the tracks of the nails. The exact point of origin should, if possible, be determined, and the patient should be asked to indicate the exact spot in which the trouble began. A history of previous skin affections, either in the region under investigation or in any other part of the body, should be sought for, as it will often furnish the only key to the situation. In the region under consideration the characteristic lesions of the various skin diseases are apt to have their identity quickly obscured by the friction of adjacent surfaces and by maceration. For example, in a case of psoriasis the lesions themselves may tell you nothing. But psoriasis is a symmetrical disease which usually begins on the elbows and knees and other parts of the extensor surfaces of the limbs. Therefore these parts should always be examined; if the marks of psoriasis are found, the nature of the disease in the perinæum, etc., is revealed. On the other hand, if unmistakable psoriatic lesions exist only in the cleft between the buttocks or anywhere in the "bathing drawers area," that fact is sufficient to prove that the disease in these situations is probably a remnant of a general attack.

AGE AND SEX.

The age and, of course, the sex must be taken into account in making the diagnosis. In infants intertrigo, eczema, and congenital syphilis are the most common affections. In young people intertrigo, eczema, impetigo contagiosa, herpes genitalis, pediculosis ("crabs") are the most frequent. The advent of middle-age brings with it a tendency to certain skin diseases, secondary either to constitutional states or to affections of internal organs. The constitutional state may either be a predisposing or a directly causative factor. Thus chronic dyspepsia, gout, rheumatism, cardiac disease, albuminuria, and

nervous disorders, from their injurious effect on the nutrition of the skin, or from the disturbance of the circulation which they cause, lower its resistance, or induce local conditions favourable for the development of disease. Then nervous excitability, without actual disease, has a strong predisposing influence. Diabetes, as is well known, is apt to produce cutaneous lesions on the genitals by the direct irritation of the sugar-loaded urine, and predisposes to boils and carbuncles.

Among the internal diseases occurring in middle age which often give rise to cutaneous complications in the perineal region, may be mentioned hemiplegia. Unless the patient is kept absolutely clean the irritation of the urine and faeces is sure to cause inflammatory lesions which, owing to the low vitality of the patient, are apt to take on unhealthy action. Kidney disease and piles are often associated with pruritus ani, and eczema is a constant accompaniment of enlargement of the prostate. In women the change of life, owing to the circulatory disturbance which is one of its principal features, is frequently accompanied by pruritus of the vulva and by local skin lesions caused by scratching. Vaginal discharge is a frequent cause of similar troubles.

In old age, when the nutrition of the skin has generally fallen below the standard of vigorous health, pruritus in various forms is particularly common. Eczema is also frequent.

MODE OF LIFE.

Inquiry must be made as to the patient's mode of life—his food and drink; his clothing, especially that which is worn next the skin; whether he has lived in the tropics. His temperament and disposition must be studied, as the "personal equation" has to be reckoned with in estimating the value of the evidence he gives about himself. Persons of a nervous temper not only complain more, but actually suffer more, than others. But it may be well to warn the practitioner not to make light of pruritus and other conditions in which the subjective sensations may appear to be exaggerated, because there is not enough visible mischief to account for them. Pruritus of the anus and of the vulva, by the continuous irritation which they produce and the consequent sleeplessness, often cause nervous prostration which may ultimately endanger reason, and even lead to suicide. It is in neurotic subjects, and more especially women, that the drug habit is most common. As to this, the practitioner must inquire with particular care. Apart from their injurious effects in other directions, bromides, opium, cocaine, and some other narcotics may all give rise to eruptions of various kinds.

GENERAL PRINCIPLES OF TREATMENT.

A few words as to the general principles of treatment. They are those which apply to skin disease of all kinds. Constitutional states must be dealt with by appropriate measures, but the treatment must be mainly local. The objects of local treatment may be summarised as follows:—(1) To soothe; (2) to disinfect and cleanse; (3) to set up reaction in order to destroy micro-organisms or to

reduce hypertrophy of epidermis or corium; (4) to cause peeling of the horny layer. For these different purposes remedies are available which may be used in various forms. The following is a list of the means at our disposal:—(1) Baths; (2) soaps; (3) powders; (4) lotions; (5) ointments; (6) pastes; (7) creams; (8) gelatines; (9) varnishes; (10) plasters. I only enumerate these vehicles here.

As one of the difficulties of treating affections of the region we are considering is the keeping of dressings in position, this seems a fitting place to describe the plan I adopt for this purpose. Strips of linen steeped in lotion or covered with ointment should be applied. A bandage should then be put round the waist, to which one corner of a handkerchief should be attached. This should be split in two, and the ends passing on either side of the genitals should be taken up the back and fastened to the waist bandage behind.

INTERTRIGO.

The most common of the diseases we have to consider is *Intertrigo*. This is an erythema caused by the chafing of opposed surfaces such as the folds of the groin, internal aspects of the thighs, the scrotum, the nates, or where the abdomen hangs over the pubic region. Obesity is a predisposing cause. The affection presents certain differences of character in infancy, in middle life, and in old age. In nurslings, the eruption generally corresponds to the parts that are in contact with the napkins. There is no exudation, but the epidermis is generally more or less macerated by sweat. In adults the ordinary seat is the side of the scrotum and the inner part of the thigh. The surface is red, glazed and hot; itching is usually very troublesome, sometimes almost maddening; and there may be severe pain. *Intertrigo* may come on acutely. The diagnosis is generally easy. The limitation of the erythema to the surfaces which have been exposed to chafing is at once suggestive of *intertrigo*. The only condition with which it is at all likely to be confounded is eczema, and from that affection it is readily distinguishable by the absence of the characteristic "weeping." In young children it is sometimes difficult to distinguish *intertrigo* from the erythematous eruption of congenital syphilis. The former, however, is, as a rule, limited to the parts covered by the napkins, whereas the latter spreads down the legs, often reaching to the heels and soles of the feet, while characteristic lesions, such as mucous tubercles, are to be found elsewhere.

TREATMENT.

The essential point in the treatment of *intertrigo* is to prevent the chafing. In infants, the parts must be kept dry by changing the napkins as often as may be required, and by careful cleansing. Irritative lesions are most apt to occur when the urine or faeces are not normal. In such case calomel may with advantage be given in doses of one-fifth of a grain. If worms are present appropriate treatment must be used. The opposing surfaces must be kept apart by means of small pads of lint or cotton wool placed not on the diseased area, but above and below it, or by the interposition of a bag made of old, used linen or other material not too thick; the pieces should be

evenly cut and sewn together, one edge being left open so that the bag may be partly filled with a powder such as one of the following:—

1. Oxide of zinc, 1 part to 3 parts of powdered rice, starch, maize, or kaolin.
2. Finely-powdered boric acid, 1 part to 3 parts of rice, starch, kaolin, or fuller's earth.

As decomposition of the secretions on the affected surfaces is likely to take place and make the irritation worse, the parts should frequently be washed with a solution of boracic acid (grs. 10 to 15 in one ounce of distilled water), carefully dried and afterwards dusted over with a protective powder. For this purpose either one of those just named, or salicylic acid 3 parts, powdered talc 87 parts, powdered starch 10 parts, may be used.

In the adult the first point to be decided is whether or not the patient should lie up. The decision of this question depends on the severity of the lesions. If there is mere sweat irritation and the subjective symptoms are not severe, he may be allowed to go about keeping the parts powdered, but he should not walk about much, and the affected surfaces should be kept cool with calamine lotion applied night and morning. Strict injunctions must be given against scratching, which, besides aggravating the condition, is apt to produce secondary lesions that may easily offer points of entry to pyogenic microbes.

ECZEMA.

Eczema about the genitals is generally of the erythematous form, and the inflammation is most severe where there is friction between adjacent surfaces. The itching is so intense that the most determined will can scarcely keep the patient from scratching. The scrotum and penis often become greatly swollen, and the disease may extend over the perinæum, round the anus, into the cleft between the nates and over the buttocks, in the fold of which it may cause deep painful cracks; not infrequently it extends over the whole "bathing drawers area." A patient in this state cannot sit down or walk without the crusts and the inflamed skin beneath them giving way; painful cracks are thus produced. In the female things are still worse. The whole process is fanned into a fierce flame by continual chafing and the acrid discharges. Almost every variety of lesion that can be caused by acute inflammation, aggravated by scratching and urine, crusts and scabs from dried discharge and fissures may be present. Eczema of the anus is often associated with external piles; the skin is thickened, and there are often painful fissures. In eczema of the vulva the parts are greatly swollen and reddened, and so painful that contact with clothes or movement is acutely painful; the passage of urine causes scalding, and there is an offensive discharge. Both in this condition and in eczema of the anus there is severe itching, and the harassing character of the affection gives a haggard expression to the countenance. In sucklings the nates and thighs are often the seat of eczematous lesions. These are frequently overlooked, as the mothers and nurses do not, in washing the babe, separate the parts sufficiently for fear of making it cry. What is conveniently, though

perhaps unscientifically, known as "sweat eczema" occurs in adults. Excessive secretion of sweat makes the skin vulnerable to the action of the parasite or whatever the cause may be which produces eczema.

TREATMENT.

In the treatment of eczema, constitutional must be combined with local measures. In acute cases the first indication is physiological rest. The patient should be kept in bed, and he should be told to move as little as possible. He should not be so warm as to promote sweating; therefore his own clothing should be light, and the bed should not be loaded with heavy coverings. The room should be kept at a moderate temperature not exceeding 60° F. An important element in the treatment is a nurse who can be trusted not to worry the patient by too much fussiness. Repose of mind is as necessary as bodily rest. The healthy action of the bowels and kidneys should be encouraged. The urine should be examined, as glycosuria is often present in fat patients, while in the thin, diabetes is not infrequent. This must be treated, as sugar in the urine is a serious aggravating circumstance, if it be not the actual cause of the skin affection. If the symptoms are very acute, milk diet should be enjoined, and throughout the illness the food should be of the simplest. In cases of average severity, no restrictions in the matter of food are necessary; abstinence from alcohol and coffee should, however, be insisted on, as both aggravate the symptoms. The cure in adults may be completed by change of air, not however at the seaside, and by a course of sulphur waters.

THE VALUE OF ANTIMONY.

If the local inflammation runs high, the internal administration of small doses of antimony will relieve the arterial tension.

If the constitution is sound I begin by giving 5 minims of antimony wine, repeating in one hour, and, if necessary, in two or three hours. After this it should be given three times a day for two, three, or four days. But antimony should not be given at all where there is much depression, and I may remind you here that arsenic is almost invariably contra-indicated in all these acute diseases of the skin.

When nervous symptoms are present small doses of opium or morphine associated with antimony are of service. Chloral, phenacetin, sulphonal, or veronal may be substituted according to indications. I know no circumstances connected with the treatment of this disease which taxes the practitioner's ingenuity more than the use of narcotics. We have first to consider idiosyncrasies. After more than 30 years' active practice I have to admit that I cannot state which is the best narcotic for the allaying of itching, or which best helps the patient to bear the torture of itching. I make it a rule to ask the patients about their experiences of narcotics before prescribing, and in this way I obtain some light as to whether the individual has any idiosyncrasies. Recently in consultation with a medical man I saw a patient who had been given a small dose of veronal

THE TREATMENT OF FURUNCULOSIS AND SUPPURATIVE ACNE.

With Special Reference to Bier's Method.

BY WILLIAM MACLENNAN, M.B., Assistant Physician, Western Infirmary, Glasgow; Lecturer, Materia Medica and Therapeutics, Queen Margaret College, Glasgow University; and Clinical Assistant to the Professor of Medicine, Glasgow University.

BIER's method of treating certain inflammatory affections has recently attracted so much attention, and been employed with so much success, that I think it worth recording my experience of its effects in some common suppurative affections of the skin.

The principle underlying this treatment is not new. Indeed, it is clear that it aims at producing conditions that Nature always, more or less efficiently, inaugurates for herself in every tissue or organ that is injured or that has become the site of infective action. All injured parts become hyperæmic—the hyperæmia being Nature's expression of a process of repair. The redness and swelling are due to an engorgement in the tissues and to an enormous local migration of leucocytes. Bier's treatment aims at reinforcing this natural hyperæmia and enhancing by its means curative influences. It is truly a conservative treatment, the object of which is to prevent, or mitigate, operative interference, and to save mutilation and future loss of function.

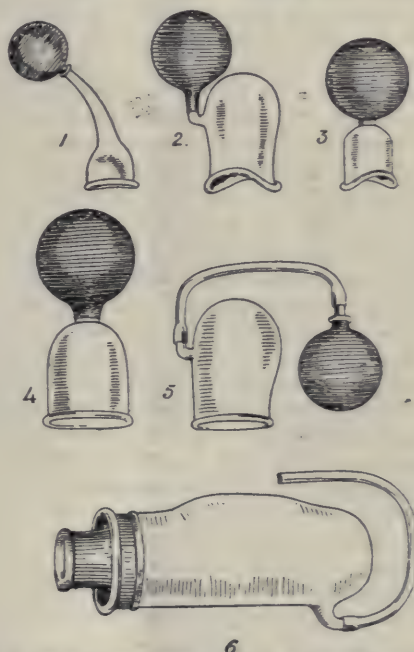
Bier employs three methods, or three different forms of appliance, to induce the desired hyperæmia: (1) hot air, (2) a compression bandage, and (3) suction apparatus. All these methods, or appliances, bring about practically the same result. None of them must be used long enough, or strongly enough, to injure the parts, to produce stasis, or to cause pain.

The scope of this paper necessitates only an explanation of the suction apparatus and the technique of its employment. Generally speaking, all superficial circumscribed inflammatory diseases may with great advantage be so treated. Thus carbuncles, boils, and suppurative acne lend themselves peculiarly well to this method, and the treatment of these conditions, with some minor variations in procedure, is also suitable for whitlows, and other surgical septic manifestations of the fingers.

The technique for these cases is simple, yet requires some practice and experience before the best results are attained. The suction apparatus required consists of small glass cups of various sizes and shapes. Their transparency is essential to enable the treatment to be controlled by sight. A convenient set comprises a series of cups ranging from a half to three inches in diameter. For flat and rounded surfaces of the skin the orifices must be of different types, and a variety can be had which makes them adaptable to almost any position. These cups end in a funnel to which is attached, by means of a stout tube, a strong resilient rubber ball for making the suction. The tube is easily detachable, and the whole apparatus can be conveniently sterilised after use. The illustration will show some of the cups which I have found most useful for the treatment of carbuncles, boils, and acne.

Large acne pustules should be opened early, before the skin becomes much implicated, with or

without any local anæsthetic, by a simple puncture with a double edged lancet. In this disease the lesions are so numerous that their individual treatment with small cupping glasses would be very tedious. I have found it equally efficacious to employ a comparatively large cup, capable of covering a good area of skin. To expedite treatment these can be applied to several areas of diseased skin at the same séance. The suction for acne should be light and only maintained for three or four minutes at a time. Treatment may with advantage be repeated thrice daily. As strict antiseptic pre-



Nos. 1 to 5.—Suction apparatus suitable for treatment of boils, carbuncles, and acne.

No. 6.—For suction of fingers, with attached rubber hood. (The diagrams are greatly reduced.)

cautions should be adopted in the treatment of acne as for boils.

In dealing with carbuncles and boils, a slight modification is required according to their stage of development. During the pre-suppurative stage the treatment aims at aborting the inflammatory process so as to prevent the formation of pus. The abortive treatment is carried out as follows.

After cleansing the skin and freezing with ethyl chloride, the thinnest slice—a mere abrasion—of cuticle is removed from the summit of the boil by means of a sharp razor cutting on the flat. No puncture is required, and the minimum amount of local wounding is desirable. The rules to be followed for the application of the suction apparatus are identical with those to be adopted for the second or suppurative stage.

The treatment after pus has begun to form consists in making a free puncture into the centre of

the frozen carbuncle or boil. The whole of the cleansed skin surrounding the boil should be smeared with a layer of carbolised lanoline (1 in 40). It is essential to remember this detail, as otherwise the neighbouring skin may readily become infected by the collection of discharge in the suction cup. The lanoline also aids the maintenance of the vacuum and thus serves to keep the cup in position. The suction ball is compressed before its application to the skin, the amount of compression depending on the vacuum desired. On relaxing the pressure, when the cup is in position, it adheres to the greased skin and the tissue bulges into the exhausted cup. When the cup is removed the exudate is to be immediately mopped off and a fresh layer of lanoline applied. Great care must also be taken not to use too small an apparatus, so as to avoid pressure on the surrounding inflammatory area. The suction cup must be large enough to ensure that its edge will only press on healthy skin. Suction must be carefully adjusted and varied according to the various requirements of each case. The small cups commonly used for the treatment of boils are suitable also for the management of acne.

Experience will quickly teach the variation required in the amount of pressure. To compress completely the rubber ball and so produce a strong vacuum is often not desirable or necessary. The pressure should be graduated. The first application should be mild, and, as the inflammation subsides, a greater vacuum, to produce a greater hyperæmia, may be advantageously employed. The object of using a glass cup instead of an opaque apparatus is to enable the operator to estimate at a glance the amount of hyperæmia induced and the quantity of discharge aspirated. If the underlying tissue becomes too livid the negative pressure is too strong and the glass must be readjusted. Similarly, if an excessive amount of exudate collects, the glass must be removed, emptied, and replaced. It is not the amount of discharge that is sucked into the cup that measures the amount of success, although undoubtedly the suction, by removing pus or serum, plays the part of aspiration and is not unimportant. This treatment is not simply a revival of the old "cupping," because, unlike cupping, it is graduated and controlled.

Each treatment should extend over a period of twenty minutes, and at the expiry of each five minutes the cup should be removed for three minutes. At first I tried the application only once a day, but soon I came to find that progress was much more rapid when the séances were shortened and increased in frequency. Thus I would now recommend that two or three times per day the suction should be applied, say, for fifteen minutes at a time, with the removal of the cup each five minutes for a period of three minutes. In dealing with pustular acne the pressure must be light, and the period of application rather—in the first instance at least—curtailed.

I have now treated ten cases of suppurative, or strumous, acne by this method, and in all the improvement was immediate and progressive. The suppurative process was arrested and the scarring diminished. The treatment, too, was a welcome

change to the patient from the constant lancing, followed by painful pressure of the pustules—the smallest puncture and the application of the cup constituting now the whole of his local treatment.

I have also tried it, in a large series of boils and carbuncles, with a uniform and encouraging success. A boil has a fairly definite duration, and the time occupied from its inception to its maturation extends from a period of from seven to ten days, or even longer. But an angry boil may be brought to a speedy termination and the suppurative process arrested by the early employment of Bier's method. What is still more, the local pain, and the even worse constitutional disturbance, are often immediately relieved, and the boil heals without the formation of the ordinary core of necrotic tissue.

This method of treatment is very valuable to the practitioner who cannot afford the time of continuous personal superintendence. After some three or four lessons of the management of the apparatus any intelligent patient may be trusted to carry out the procedure without risk of doing harm. Any excess of negative pressure will in most instances proclaim itself to the patient (by pain or discomfort), who will forthwith rectify it by gentle pressure on the ball. The other essential details he will soon pick up. While Bier's treatment is proceeding, constitutional treatment need not be neglected, and the combination of the two will, in my experience, give results that have never hitherto been attained.

The patient should be imbued with the necessity of regarding his affection as one capable of spreading by direct contiguity. He ought to carry out the most thorough cleansing of the skin, both before and after treatment, by the application of spirit, ethereal soap, or other antiseptic. No constant application of ointments is required, and unsightly dressings are discarded. When the suction cup is removed after treatment the exudation spontaneously ceases.

With this treatment, as with all others, success is not invariable, especially till experience is gained, but the results I have obtained convince me of its great superiority over the ordinary methods in vogue. From beginning to end it is practically painless, prevents destruction of tissue and loss of function, leaves a surface which heals without scarring, and almost invariably lessens the duration of these affections.

NEW APPLIANCES AND THINGS MEDICAL

BAYER'S PHARMACEUTICAL PRODUCTS.

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POINTS IN TREATMENT.

IODIPIN.

NOBODY has the least doubt of the efficacy of potassium iodide in the relief of tertiary syphilitic ulcerations, gummata, and sores; especially if the patient has been through a course of mercurial treatment at a former date, or is given mercury at the same time as the potassium iodide. When mercury has not been previously given, and the potassium iodide is tried alone, the results are much less good in many cases; the reason for this appears to be that mercury, when once given, remains stored for many years in the body, more especially in the bones, so that the administration of iodides to persons who have had mercurial treatment leads to the setting free of some of this as soluble iodide of mercury.

There are, of course, many syphilitic affections which are not influenced by drugs at all. Locomotor ataxy, for example, in which the sclerosis of the posterior columns of the cord, though primarily due to syphilis, is ultimately identical with what would follow section of the columns with a knife. Potassium iodide and mercury would not cure the sclerosis which would result from section of these columns: they will have no more effect upon the sclerosis because it happens to be due to syphilis instead of a knife. The iodides only cure the granulomatous results of syphilis; they lead to cure of gummata by conversion of the small round celled collections into mature fibrous tissue, the result being a healed scar; but they will not remove the scar itself, nor the results of the scar, should there be any, as in the case of gummatous meningitis and so on.

If potassium iodide could always be well borne by every syphilitic patient there would be no need to search for any other means of administering an iodide; hence nobody is likely to try anything but iodide of potassium in these cases in the first instance. Unfortunately, however, there are many patients who suffer acutely from the effects of the drug itself, the three chief troubles arising from it being acne boils, extreme mental and bodily depression, and loss of flesh. The depression is the most serious of the three, but not infrequently all three occur together. Before giving up the iodide of potassium, the physician will probably make several changes in his prescription to try and circumvent its ill effects. In the first place, he will no doubt follow the old adage: "If potassium iodide produces acne or depression, double the dose, and the trouble will often cease." He may find that whereas five-grain doses are not enough to cure the syphilitic trouble, and whereas ten-grain doses, though curing the syphilis, are unbearable to the patient, 20 to 30-grain doses three times a day may be well borne, and may effect a rapid cure. If this be not so, he will probably prescribe 3-minim doses of liquor arsenicalis with each dose of the iodide, and thereby lessen the acneiform eruption; or he may prescribe 15 minims of aromatic spirits of ammonia in each dose to lessen the depression.

Supposing, however, that none of these measures succeed, the next step will probably be to prescribe

part of the iodide as another salt than that of potassium. Unfortunately, sodium iodide, ammonium iodide, and lithium iodide will none of them produce the rapid cure of gummata that potassium iodide will; hence it is not possible, as a rule, to eliminate all the potassium iodide from the prescription. Nevertheless, part of the iodide can be given as the sodium or ammonium salts, provided more of the latter are ordered than is equivalent to the potassium iodide replaced. For example, if the patient should require 15-grain doses of potassium iodide, but cannot take more than ten grains at a time without suffering from severe depression, it is possible to obtain a good effect equivalent to that of 15 grains of potassium iodide by giving ten grains each of sodium, ammonium, and potassium iodides, thus:—

| | | | | | |
|----|----------------------------|-----|-----|-----|------------|
| R. | Potassii iodidi | ... | ... | ... | gr. x. |
| | Sodii iodidi | ... | ... | ... | gr. x. |
| | Ammonii iodidi | ... | ... | ... | gr. x. |
| | Spiritus ammonii aromatici | ... | ... | ... | ℥xv. |
| | Aquam chloroformi ad | ... | ... | ... | 3j. t.d.s. |

Notwithstanding attempts such as the above to obviate the depressing effects of potassium iodide, there will still be patients who absolutely cannot take potassium iodide in the needful quantities at all. It becomes necessary to find some other iodine preparation that they can take. There are many to be bought, in the form of syrups, hydriodic acid, and so on; but it is always difficult to know which of the advertised remedies is any use, and which useless. Every advertised article is naturally regarded with suspicion, but it is wrong to suppose that all are to be avoided. The profession must be grateful to its members who try to weed out the bad preparations from the good, and when the good are known they will be used in appropriate cases. As an example of an advertised medicine which is proved to be of immense benefit in some conditions, we have aceto-salicylic acid (=aspirin); as an example of an iodide which produces all the good without many of the bad effects of potassium iodide we have iodipin. Many medical men of standing have tried it, and have reported well of its effects. It will probably not be tried until potassium iodide has been found impossible of use in any particular case; but, failing potassium iodide, it is good to know that iodipin can take its place.

The preparation is a combination of iodine with sesame oil, discovered by Winternitz; it can be prescribed in various strengths, the two most usual being a 10-per cent. solution and a 25-per cent. solution. Upon the continent it is largely administered by subcutaneous or intramuscular injection; if it could be used only by this method it would commend itself to few, but, among others, Dr. Stopford Taylor and Dr. MacKenna, of the Liverpool Skin Hospital, have watched the results of giving it by the mouth, and they find them excellent. Some very severe cases of tertiary syphilis were thus treated by them, with rapid improvement

in the condition. They prescribed 30 minims of 25-per cent. iodipin in milk, three times a day, about two hours after food. In twelve days, after taking $1\frac{1}{2}$ oz. of iodipin altogether, the lesions, previously very severe, were upon the high road to being healed.

They find that whereas potassium iodide is very rapidly eliminated from the body, particularly in the urine, iodipin is thus lost much more slowly;

even two months after the last dose iodine has still been found in the urine. This slow elimination is possibly one of the chief causes of its efficacy; in any case, no symptoms of iodism, and no depression is observed, and the patients gain, rather than lose flesh. We wish that iodipin were a pharmacoepoial and not a proprietary drug, for it is a drug which will almost certainly prove useful in many cases where potassium iodide cannot be borne.

THE TREATMENT OF INFLUENZA.

By THOMAS WILSON BANKS, M.B., C.M., Mervyn, Lanark.

EVERY practitioner has his own way of treating influenza.

I have tried several drugs, such as (1) ammoniated quinine (as recommended by Sir Wm. Broadbent); (2) Dover's powder (the late Sir Grainger Stewart); (3) quin. sulph. (2 gr. every four hours), but I find I get far quicker and better results from—

| | | | | |
|-----------------|-----|-----|-----|---------|
| Sod. salicyl. | ... | ... | ... | gr. xv. |
| Antifeb. | ... | ... | ... | gr. ij. |
| Ft. pulv. Tales | ... | ... | ... | ijj. |

Sig. : Take one every four hours.

This produces profuse perspiration in nearly every case; although I have seen one or two cases unaffected in that way, yet the pains and temperature were relieved to a considerable extent. Three more powders generally produce the desired effect. Most of my patients (and I have treated hundreds) say that it acts like a charm. Headaches, pains all over the body, sore throat, and temperature are all gone in a short time, and although the

patients are weak for a day or two they soon gain their usual strength.

I keep them on hot drinks, and four hours after the third powder they require a thorough dry change of clothing followed by a dose of opening medicine. I keep them in bed two days after they feel quite well. Then they begin to get up a little longer each day, and by the end of seven days they are ready for their work.

Dr. Leach, in THE HOSPITAL, May 25, 1907, page 208, says that epistaxis may be produced by salicylate of soda, and quotes one case. I have never seen this happen, nor have I ever heard or read of this before. It would be interesting to hear if another such case has happened in the practice of other medical men.

In all the cases that I have treated with salicylate of soda and antifebrin I have not seen any bad effects except a little "singing in the ears" which soon passed off, and I cannot remember having a case followed by complications.

POINTS IN PATHOLOGY.

CEREBRAL HÆMORRHAGE DUE TO PROLAPSUS UTERI.

It is sometimes forgotten that the renal fibrosis caused by chronic ascending nephritis may produce results precisely similar to those of an ordinary granular kidney. Chronic ascending nephritis is very insidious in its onset; it results gradually from any condition in which there is obstruction to the outflow of urine from the ureters. It is a lesion quite distinct from the so-called surgical kidney, in which the changes are also "ascending"; in the surgical kidney proper the ascending nephritis is suppurative, and the symptoms are acute; in chronic ascending nephritis there is no suppuration, but a gradual replacement of the kidney substance by fibrous tissue until ultimately a deeply scarred and puckered viscus results, with diminished cortex, and an obviously granular surface when the capsule is peeled off.

It seems at first sight a far cry to connect a prolapsed uterus with a cerebral hæmorrhage, as cause and effect; but we have seen more than one example of the connection. The prolapsed uterus carries with it the bladder and the lower ends of the ureters; the latter become bent upon themselves, or

kinked, at a point about one inch above their openings into the bladder. The result is an obstruction to the outflow of urine through the ureters, and this obstruction is occasionally sufficient to cause insidious but progressive fibrotic nephritis. The result of the renal degeneration is then similar to that of primary granular kidney; the left ventricle enlarges, the arteries degenerate, and the blood-pressure becomes high. Amongst the degenerate vessels may be those in the brain; the high blood-pressure ruptures one of these at its weakest spot, and the patient has a cerebral hæmorrhage which she probably would not have had if she had not suffered from a prolapsed uterus of long standing.

Fortunately this sequence of events is not common, probably because the ureters manage to accommodate themselves to their altered position without becoming greatly obstructed in most cases. Nevertheless, the undoubted occurrence of fibrotic kidneys from this cause, and the occasional termination of the case in apoplexy, must be an additional reason for doing everything possible for the relief of a prolapsed uterus.

OPHTHALMOLOGY.

HINTS ON THE TREATMENT OF ERRORS OF REFRACTION.

THE APPARATUS REQUIRED.

For testing visual acuity and for the estimation of errors of refraction a well-lighted room is required, which if possible should be twenty feet long. The modern system of visual notation supposes that the test is carried out with the patient six metres, or approximately twenty feet, from the types which he is required to read. Twenty-five feet is a more desirable length for the room, as it allows for a chair on which the patient may sit, and gives a space behind the chair for the oculist to move to and fro without crossing the line of vision.

Should the room be less than fifteen feet long, it may be arranged that the patient shall see types placed above his own head and viewed in a mirror on the opposite wall. This doubles the apparent distance of the types, and under these conditions a twenty foot basis may be obtained in a room with a diagonal of little over ten feet. The types seen in a mirror are, of course, reversed, and special cards with reversed types must be obtained for the purpose. The letters should properly be illuminated by artificial light, as a more constant standard is obtained, though a good top or north light falling directly upon the types is almost as satisfactory. The letters should be mounted on wood, or painted black upon white opaline glass, and should range in size from $\frac{6}{10}$ to $\frac{6}{5}$.

For retinoscopy and the examination of the fundus oculi a good Argand gas burner is the best light, but should this be not available an incandescent mantle in a metal chimney with a frosted-glass aperture, an incandescent electric globe, with a filament in the form of a gridiron instead of a loop, or a broad-flamed oil lamp are fairly efficient substitutes. Any light for ophthalmic purposes should be mounted upon an arm which has an elbow joint, and can be moved up and down.

THE TEST LENSES.

The lenses required for testing purposes are the most expensive part of the outfit. It is necessary to have a complete double set of both convex and concave glasses from .25D to 20D, with double sets of cylinders from .25D to 6D. In addition, a set of prisms will be required, and also coloured glasses, diaphragms, and spectacle frames with two grooves, for spherical and cylindrical glasses at the same time. Contracted or portable sets of lenses, with simplified spectacle frames, are useless, as so much time is lost in making up the proper combinations of lenses, and the vision is never so accurately estimated through three or four glasses as through two only. The lenses can be obtained either mounted or unmounted; the former costing about £13, the latter about £10.

For retinoscopy alone a simple plane mirror is advised, though the ordinary concave mirror of the

ophthalmoscope may be used for the purpose. The advantages of a plane mirror are that it is more accurate in its estimation, that its accuracy does not vary with the distance of the operator from the patient, that it is larger and so gives more light, and that it can also have a larger central aperture, which should not be less than $\frac{1}{8}$ in. in diameter. An ophthalmoscope also will be required for further investigations into ocular defects, but as this instrument forms part of every doctor's outfit no further reference need be made to it.

ROUTINE.

It is advisable to do a retinoscopy upon every patient who may wish to be tested for glasses. All children should be treated before retinoscopy by the instillation of atropine drops (four grains of the sulphate to 1 oz. of water) into both eyes three times a day for a week. Children are notoriously tolerant of atropine, and it is only in very occasional cases that dryness of the throat and thirst, and more rarely still that sleeplessness and nocturnal delirium occur.

All young adults should also be treated with atropine or homatropine. As their time is more valuable and the effects of atropine take some week or ten days to wear off, it is usually better to use homatropine or a combination of homatropine and cocaine. The following formula makes the best solution:—

| | | | |
|--------------------------|-----|-----|-----------|
| Homatropine hydrobromate | ... | ... | gr. iv. |
| Cocaine hydrochloride | ... | ... | gr. viij. |
| Distilled water to | ... | ... | 1 oz. |

As homatropine is a very expensive drug, it is advisable not to order it for patients unless absolutely necessary, for 1 oz. of such a solution as this costs anything from 6s. to 12s. It is the most convenient for the practitioner to keep in stock, as its action is very complete and rapid, but as the solutions do not keep very well, those who are likely to need homatropine and cocaine but seldom are advised to get lamellæ or ophthalmic tablets.

If homatropine and cocaine are used the drops should be put into the patient's eyes at least twice, at an interval of ten minutes. At the end of another twenty or thirty minutes the pupils will be thoroughly dilated, and the accommodation, though not paralysed entirely, will be much lessened in power.

Patients over forty should in ordinary cases be tested for glasses without dilatation of pupil. It is usually required to test their vision for near as well as distant vision, and the use of mydriatics will prevent this being done.

In difficult cases of astigmatism, however, or failure of vision from defects of the media or the retina, dilatation of the pupil is required. This can be done quite safely if due precautions are taken to avoid cases of increased tension; homatropine and cocaine is the most useful combination for the purpose.

PATHOLOGY IN GENERAL PRACTICE.

COCCI: THEIR DEMONSTRATION AND SIGNIFICANCE. *(Concluded from p. 261.)*

THE gonococcus is in many ways one of the most important of the specific cocci, both the various acute troubles it gives rise to, and the late results which may follow these, often being of the utmost importance to the practitioner. Gonorrhœa is a much more serious complaint than is generally supposed, and it may often be a question of the greatest difficulty to say whether or not, especially in the chronic cases, the source of infection has disappeared and the person is safe. The neglect of careful examination and advice in such examples may often lead to dire mischief to a young wife, the results of which are too often permanent and the starting-point of chronic ill-health for the rest of life. The question of sterility, the medico-legal bearing of cases of criminal rape on infants by people suffering from gonorrhœa, the question of gonorrhœal conjunctivitis are a few of the other points which may arise and require investigation at any time; and all this being so, it will be readily understood how important it is to be able to detect this organism.

THE GONOCOCCUS.

The gonococcus is a small organism, usually occurring in diplococcic form, the two opposed sides being flattened or slightly concave, giving the appearance of two little beans or two little kidneys placed side by side. Both tetrads and single specimens may be seen, but they are much rarer than the typical picture just described. Gonococci stain readily with any of the simple stains, perhaps the best of these being carbol thionin, and they lose—*i.e.*, do not stain—by Gram's stain; this latter peculiarity is a diagnostic point of great value and one which should never be omitted in a routine examination. Another differential stain recommended by Schütz is as follows:—(1) Sat. aq. methylene blue in 5 per cent. carbolic. Five to ten minutes. (2) Wash. (3) Decolorise with acetic acid, 5 drops in 20c.c. water. Three seconds. (4) Wash, dry and mount.

The gonococci by this method are blue, other organisms unstained. The organisms are demonstrated in the usual manner by making smears of the suspected discharge; they are present in large numbers in the acute cases, male or female, and have this peculiarity—namely, that they are almost all contained within the polymorphonuclear leucocytes; that is, in the cells that form the pus. In the female it is of little use taking an ordinary swab from the vagina; the sites to be selected are the urethra and cervix, and the practitioner must remember this in order to avoid confusion or a wrong diagnosis. A case in point illustrative of this was that of a girl (unmarried) with a discharge from the vagina. In the first instance an ordinary vaginal smear was negative as regards the gonococcus, but a subsequent one from the urethra showed absolutely typical and very numerous gonococci; hence if a diagnosis had been given on the first specimen alone,

it would have been a very fallacious one. After the acute symptoms have passed off, the purulent discharge gradually disappears and is replaced by a thin glairy one, which in turn may quickly disappear or pass on to a definite gleet, or only a "morning drop."

DIFFICULTIES.

Here the difficulty often begins; in some instances typical gonococci may be readily detected in such discharges, but in others, owing to the addition of other cocci or bacilli (mixed infections), it may not be so easy, and one's differential stains must then be used to determine the point. Further, by now, as the case has become chronic (the morning drop, for example), the microscopic character of the secretion has altered, and many large squamous cells have taken the place of the previous abundant pus-cells, this desquamation being due to the passage of the cocci down through the mucous membrane into the deeper layers, where they have set up inflammatory changes. In such a case the gonococci may be seen lying on the dead squamous cells, or free, or a few may still be in the pus-cells, or none may be detected at all. Though absent, it is not safe to say the person is cured; in many instances of this kind a night's indulgence in alcohol or sexual intercourse will bring back the purulent discharge almost at once, and typical gonococci may again be detected. The explanation of this is simply that the organisms have not really been absent, but have been lying hidden in the crypts of the glands, in the deeper layers of the mucosa, or in the prostate, where any excitant may quickly stir them into activity again, and so cause a renewal of the symptoms. Some of the very chronic cases are very hopeless, the infection persisting and persisting (Wertheim cultivated them from a case of two years' standing), and here other cocci are generally present, aggravating and keeping up the condition. It has recently been shown that the gonococcus may have a much wider distribution in man than was formerly supposed. Leaving out of account conjunctivitis cases, which are caused by direct infection and which may be easily diagnosed by suitably stained smears, the organism has been found in joints, sheaths of tendons, ulcerative endocarditis, pus from the pleura, peritonitis (females) from spread through the Fallopian tubes which may also contain pus (pyosalpinx), abscesses in epididymis, periurethral abscesses, etc.

The last coccus we may mention is the *Diplococcus Intracellularis Meningitidis* of Weichselbaum, the usually accepted cause of epidemic cerebro-spinal meningitis. Morphologically it resembles the gonococcus somewhat closely, being like it in shape, also being found in the pus-cells, and by not staining by Gram's stain. It may be demonstrated in smears taken from the purulent material drawn off by lumbar puncture of such cases, thionic blue, or any of the other common stains showing it up quite clearly.

THE GENERAL PRACTITIONER'S COLUMN.

[Contributions to this Column are invited, and if accepted will be paid for.]

ON TREATMENT BY SUGGESTION WITHOUT SLEEP.

By EDWIN ASH, M.B., B.S., Lond., M.R.C.S., Eng. (sometime Demonstrator of Physiology and House Physician at St. Mary's Hospital, W.).

ALTHOUGH the therapeutic efficacy of hypnotism is now well established, a great aversion to its use is manifested by both the medical profession and the public. This is perhaps not strange when we remember that hypnotic treatment necessitates a complete surrendering of faculties to the operator with a period of unconsciousness for the patient. The objection persists in spite of all that has been written and said in explanation of hypno-therapeutics and of the harmlessness of somnambulism when controlled by an experienced agent. In consequence, when my investigations were directed from the experimental aspect of the influence of suggestion to its therapeutic application, I endeavoured to confirm the observations of numerous contemporaries that suggestive therapeutics can be successfully practised without the induction of sleep. And the results obtained have shown me that by the careful application of a certain technique Direct Suggestion will do much to relieve a large number of functional neuroses. Indeed, it is remarkable to find how pain and hyperaesthesia of special senses can be alleviated by a simple system of suggestive therapy, in the application of which *one's patients are conscious of all that is being done, and moreover retain perfect liberty of thought and action.*

The technique indicated is familiar to all students of the Nancy School, and depends on gaining the patient's confidence, and verbally repeating the necessary suggestions until the requisite curative idea has been thoroughly established in his Subconscious Mind. Everyone who is practically acquainted with the methods of suggestion knows that the secret of success lies firstly in a preliminary fixation of the patient's attention on the physician to the extinction of all other things; and secondly, in an untiring repetition of the required suggestions. The process can be aided by transferring the patient's attention to the affected part, which is best done by placing one's hand over the area in question. There is nothing mysterious in this; one is desirous of keeping the patient's thoughts on some particular symptom and directs his attention thereto by touching this or that particular region. The whole method is based on the simple psychological principles of attention and ideation.

There is no doubt that the principle of suggestion has been the paramount factor in numerous "healing systems" that have been exploited recently. Indeed its indirect application has resulted in the extraordinary cures that are constantly reported by the adherents of such systems, by the vendors of patent medicines and of wondrous electrical appliances, and occasionally by a medical man astonished at the result obtained by the use of some simple remedy. Yet the profession as a whole has refused to credit the practical importance of direct or verbal suggestion, with the result that few

of its members have dared openly to acknowledge its use. Those few have been rewarded by their successful efforts in treatment as a set off to the opposition, and even ridicule, of their medical brethren.

That most able exponent of this method of treatment—Dr. Bernheim, of Nancy—contended that suggestion is always beneficial, sometimes curative. And a reference to my case-books will support his contention better than any theoretical argument.

Among the first cases I treated by suggestion without sleep were two of functional enuresis nocturna. The first of these was a girl 15 years of age, who was unable to remain in service owing to the unpleasant nature of her affliction. She had 14 sittings during three months, suggestions being given that she should awaken with intent at a certain time each night. There was definite improvement after the third sitting, and complete recovery after the tenth. At no time during the treatment was the patient unconscious. The other case of this description was also relieved, and was very interesting because I first treated him in the somnambulant state without result. So I tried suggestion in the waking state with fixed attention, and obtained immediate improvement, with ultimate cure. The condition of these young people with enuresis nocturna is most distressing, and if no organic cause can be found it seems desirable, after a consideration of the above results, that they should be given the benefit of treatment by suggestion as soon as it is found that the orthodox medical remedies are doing no good.

Another class of case in which excellent results can be obtained is that which exhibits insomnia with or without accompanying neuroses. The sleeplessness can often be relieved immediately so as to break the vicious cycle of events; and an improvement in the condition of general depression and "nervousness" which usually accompanies the insomnia can then be expected. It is not only as an absolute curative agent that suggestion should find a place in the armoury of modern therapeutics, for in the method of treatment by suggestion we have a ready means of relieving distressing symptoms in diseases that may be in themselves incurable. For example, I have in actual practice effectively relieved the severe pains of tabes dorsalis by suggestion; and on another occasion stopped an abdominal pain.

The method I now use exclusively is that of fixation of attention with repetition of verbal suggestions, without any loss of consciousness or will on the part of the patients. At the same time I insist on the treatment being carried out under the most advantageous conditions, and am always very careful to build up simultaneously an impoverished system by due attention to dietetic and hæmatinic measures.

A BOOK ON CANCER.*

THE book with which we have here to deal is written by Dr. Jno. Shaw. We may say at once that it is a most disappointing production. Its title is charged with great expectations, but the measure of its achievement is limited in the extreme. Of loose, vague, prolix writing there is an abundant supply, but definite and practical evidence is indeed sadly to seek.

ITS MAIN THESES.

The main theses of the book are two in number. First, that cancer can be cured without operation. Secondly, that increased operative activity is responsible for an increased cancer mortality. These are simple and direct propositions. They are also propositions of great moment. It might, therefore, have been expected that the writer who advances them would have addressed himself to a serious presentation of the evidence necessary for their support. But such is not the method of Dr. Shaw. If the position he adopts is well founded, he is in possession of a form, or forms, of treatment by means of which malignant disease can be successfully treated. Yet his book may be read from cover to cover without the reader gaining any direction as to what should be done in, say, a plain and manifest case of carcinoma of the breast. Should such a case be dealt with by the surgeon? Or should the patient be told that removal of the breast is unnecessary? And if the latter, what form of treatment should be advised? These surely are the questions to which answers might be anticipated in a book professing to deal with the cure of cancer.

But in Dr. Shaw's book we look for such answers in vain. It is true that the author's attitude is distinguished by a wholesale distrust—not always very courteously expressed—of both the practitioners and the procedures of surgery. It is also true that he names a long list of agents which at various times have been claimed as remedies in the treatment of cancer. But of the great majority of these he appears to have had no personal experience, and, in the end, we are left utterly in the dark whether in any individual case of cancer we ought to prescribe compression, galvanism, *x*-rays, high-frequency currents, arsenic, iodine, bromine, iron, conium, opium, antipyrine, belladonna, mezereon, chian turpentine, eucalyptus oil, cinnamon of sodium, violet leaves, ox-gall, soap solution, trypsin, iodipin, potassium iodide, thyroid gland, intestinal gland, mammary gland, lymphatic gland, or "sandwiches of raw-heart muscle." It is nothing to the point to quote individual instances in which writers of more or less authority have claimed good results from the use of one or other of these various substances. Such references are familiar to every practitioner, as are also the occasional records of the

spontaneous disappearance of apparently malignant growths.

The question is not, Do such things occur? but, Are they a valid basis for practice? To make such exceptional experiences the opportunity for informing patients, as Dr. Shaw does on his first page, that "cancer is recoverable to the very uttermost" seems to us as morally indefensible as it is illogical. At least this is the verdict which must be passed on such a statement in the absence of a plain indication of the methods by which recovery is to be assured.

Instead of addressing himself to the essential issue suggested by the title of his book—an issue of momentous and immediate importance to thousands of doomed and despairing men and women—Dr. Shaw occupies himself with such trifles as the history of cinchona bark and the Bradshaw lecturer's infelicitous quotations, and fills his pages with musty paragraphs from medical literature, the majority of which have little concern with the urgent question he professes his ability to answer. Hence, in spite of his heroics and moralisings, we cannot recognise that he has any adequate appreciation of the responsibility he has assumed. Men through long years have waited wearily and with hope deferred for a knowledge of the successful treatment of cancer. And yet, in face of this, and in the presence of a multitude of unhappy victims, Dr. Shaw has considered it seemly to deal with the subject in the way we have described. We do not envy him the terrible responsibility he has incurred.

ITS CONCLUSION.

As for the contention that to surgery is due an increase in the cancer mortality, the principal argument advanced is that surgical operations are more numerous now than was formerly the case, and that the same is true of deaths from cancer. With this kind of logic Dr. Shaw is presumably content. We make no question of his earnestness and sincerity; but he must not expect his readers to be so easily satisfied. But we do say that his book shows him to be wholly wanting in a recognition of the serious and solemn responsibility assumed by any medical practitioner who professes the possession of knowledge by which cancer can be cured, and who at the same time abstains from a clear definition of the methods by which this end is to be attained. Dr. Shaw has complained that certain opportunities for publicity have been denied him. The complaint is absurd, for there is no one the medical profession and the public will hear more gladly than the fortunate discoverer of a successful method of relieving and curing the victims of malignant disease. In his own book, at all events, he has a full opportunity, and as we must assume that he has now delivered his soul, we can only regret that the result is so ridiculously unequal to the claims advanced in its favour. So far as our influence extends, we emphatically protest against the attempt to claim for this thing of shreds and patches, of puerilities, and secondhand gossip, the distinction of a serious work on the cure of cancer.

* The Cure of Cancer and How Surgery Blocks the Way. By Jno. Shaw, M.D.Lond. F. S. Turney, London, 1907. Pp. xx. and 229.

LARYNGOLOGY AND RHINOLOGY.

VOICE HYGIENE.

WANT of observation of the ordinary rules of health and misdirected energy in using the voice are the chief causes of the breakdown of the untrained vocalist, bringing him to the practitioner for treatment under such names as cold, clergyman's sore-throat, or hysterical aphonia. Such conditions are easily prevented and treated by following rules which are readily understood when the physiology of the voice is analysed. Briefly, voice is the product of a current of air emitted from the chest under the control of the respiratory muscles, and set into vibrations by the movements of the vocal cords. Those vibrations are resonated in the cavities above the glottis, and formed into articulate speech by the movements of the tongue in the mouth and pharynx. The most delicate part of this mechanism is the glottis, and our efforts are directed to preserving it intact for its proper function of causing vibrations in the issuing current of air; when this is damaged, natural efforts at compensation are apt to start a true vicious circle. This is easily recognised when one attempts without training to sing up the scale. The glottis, feeling itself failing, endeavours, by increased muscular effort, to maintain its efficiency till its own intrinsic muscles being used up, it calls in to its aid the constrictors and elevators of the pharynx. But by the use of those muscles "the throat is gripped," and the pharynx diminished in calibre, so that its value as a resonance chamber is lost. The voice is pitched higher, and to maintain this high pitch the expiratory blast must be increased in power, and the glottis is kept constantly contracted. Not only does this require the increased muscular effort which started the vicious circle, but the frequent violent closure of the glottis injures its mucous membrane, hinders the circulation, and sets up a laryngitis, which still further injures the function of the larynx. The final stage is reached when the muscles are completely worn out, and aphonia results.

The least deterioration of the proper function of the larynx having such results, the causes thereof must be investigated and removed. Apart from gross destruction by disease, which is not considered here, the causes are twofold: first, insufficient control of the expiratory current by the respiratory muscles; and, secondly, disease of the cavities above the glottis. To control respiration the ordinary individual uses his glottis in addition to the respiratory muscles; but when, as in vocalists, the glottis is more frequently called upon to exercise its true function, the strain of controlling the respiration also is too great, and the larynx deteriorates. To avoid this the diaphragm must be accustomed to keep complete voluntary control of the respiration. High authorities regard the proper function of the thoracic muscles as merely that of fixing the chest in the full inspiratory position, "the high chest position." The position, however, entails such rigid contraction of the neck muscles and consequent venous engorgement that it is best avoided, and a style of breathing more nearly normal adopted. The

spinal column is in truth the only proper *point d'appui* for the mechanism of respiration. All exercises should include some performed lying flat on the back. The exercises should ring the changes on slow deep inspiration and expiration, sudden inspiration and expiration, and graduated expiration. General muscular development must be maintained by ordinary hygienic measures: brisk rubbing after bathing, the use of dumb-bells or Indian clubs, or other athletic exercises adapted to the individual.

In discussing the second cause of deterioration of the larynx—disease of the upper cavities—it would be beyond the scope of this article to include more than such disease as is barely considered a departure from the normal—namely, catarrh of the mucous membrane—rhinitis, naso-pharyngitis, pharyngitis, and stomatitis. Those conditions cause swelling of parts, and so diminish the size and resonating value of the chambers involved; they further give rise to increased secretion, which, gravitating down on to the cords, sets up laryngitis either by infection or by mechanical insult. Further efforts are made to expel the inspissated secretion by violent coughing, so that the glottis is still further injured. The treatment of catarrh depends on the region involved; in the nose and naso-pharynx a nasal lotion of sod. bicarb., borax, sacch. alb., of each gr. iij.; acid carbol., gr. j.; aq. dist., 3j., will lessen secretion and turbinal hypertrophy, and adenoids may require operative treatment. Pharyngitis *per se* merely requires the use of any simple throat lozenge, but the underlying cause must be discovered and treated, notably the excessive use of alcohol and tobacco; the ingestion of highly seasoned food and hot drinks; the various disorders of digestion, especially constipation; rhinitis, tonsillitis, and, above all, stomatitis. The oral cavity has been left to the last, but only to emphasise its importance in all disorders of the pharynx and larynx. The sequels of dental stomatitis are well known. The teeth must be carefully examined, tooth-plates being always removed for this purpose.

Finally, it should be mentioned that careful and distinct articulation takes the strain so much off the larynx that all regular voice users should practise it.

THE BOOK WORLD OF MEDICINE AND SCIENCE.

INTERNATIONAL CLINICS. Sixteenth Series, Vol. IV.; and Seventeenth Series, Vol. I. (Philadelphia and London: J. B. Lippincott Company. 1906-7.)

We have quite recently had an opportunity of expressing our appreciation of the high standard maintained in this valuable serial publication. The two issues now before us are fully up to the level of their predecessors. They provide a most excellent list of original articles and clinical lectures on subjects included in the various departments of medicine, and we have no hesitation in commending them to our readers. In the last volume for the year 1906 may be found a convenient and lucid statement of medical progress during the preceding twelve months.

DISEASES OF CHILDREN.

DISORDERS OF SLEEP.

He started up in bed with a piercing shriek, and shouted out, "The devil is here; take the knife away for he has cut her head off." His eyes were like saucers, his body trembled, and he sweated freely. Such is the vivid description of an attack of pavor nocturnus or night terrors in a boy aged five years.

These attacks come on in the early part of the night, an hour or two after going to sleep. The emotional distress is a prominent feature. It is a state of terror or mental confusion, perhaps a feeling of suffocation. The child is oblivious of its surroundings, does not recognise the attendant, and has hallucinations of vision, rarely auditory ones. Usually he falls asleep without recovering consciousness, in a few minutes to an hour, and next day has no remembrance, or merely a dim recollection of something horrible. There is rarely more than one attack a night. It may recur nightly for a time, at varying intervals, or quite irregularly. The hallucinations are almost always of the same nature.

In one variety the terror is subjective, more allied to nightmare, and possibly asphyxial in origin, the result of slowly developing carbonic-acid poisoning. Such attacks develop slowly, coming on an hour or more after going to sleep, and the feeling of suffocation, the mental confusion, hallucinations, amnesia, and muscular weakness are due to the asphyxia. The muscular weakness is shown by the inability to articulate clearly, so often present, and the clumsy movements. The susceptibility to this variety and the severity of the attacks are almost directly proportionate to the degree of nasal obstruction by adenoids and enlarged tonsils. Fright and hallucinations may occur in any disease leading to asphyxia, such as bronchitis, pneumonic affections, and faucial angina. Some attacks appear due to gastric or intestinal causes. If we accept the asphyxial view of the pathology, we must assume that in these cases the dyspnoea and sense of suffocation are due to reflex stimulation of the vagus.

In another variety, which may be called primary cerebral or idiopathic, the terror is objective, and is dependent on undue excitement of the cerebral cortex in a nervous child. Possibly alimentary toxins, circulating in the blood, induce the attack. A careful search must be made for any source of asphyxia. In these children there is often a predisposing factor in the shape of a neurotic or alcoholic parentage, a rheumatic diathesis, or a history of infantile convulsions. They show signs of neurasthenia; are nervous, irritable, impressionable, excitable, and often anæmic. They sleep lightly and restlessly, and are easily disturbed. The actual exciting cause may be the same as in the first variety of pavor; may be school work or excitement of any kind, dark rooms, tales of ghosts or gruesome pictures; or may be fever, or tuberculous meningitis, or injury to the head. In normal healthy children ghost tales and horrors do not induce an attack. Possibly they merely formulate the vision in the susceptible child.

In the cerebral type the pavor may be diurnal as well as nocturnal. An anæmic, dyspeptic boy, sixteen months old, had continual screaming attacks, of sudden onset and duration, with no loss of consciousness, and followed by trembling for about ten minutes. He got well. Pavor diurnus is rarely found independently of pavor nocturnus. It may be summed up as unaccountable terror and screaming while awake and perhaps in the middle of an enjoyable game.

Pavor is most common in the third and fourth years of life, the age at which adenoids produce most nasal obstruction. It remains fairly common up to the seventh year, and is rare after the age of ten. School life begins during this period, and, in addition, digestive disorders are liable to arise from dentition.

Nightmare, somnambulism, and teeth-grinding are affections allied to pavor. All may occur in the same child at different times. In nightmare there is a peculiar kind of dream, in which there is great distress, because of a feeling of inability to move and save oneself from a horrible or fatal situation. It is a terrifying dream, and causes the child to wake up frightened and excited, but the mind is clear, the attendants are recognised, and the occurrence, and often the details, of the dream are remembered next day. In pavor the child sees visions; in nightmare he dreams dreams.

Somnambulism is a type of nightmare. The term may be taken to include all varieties of motor action during sleep, and should not be limited to mere "walking." In its mildest form it is indicated by "talking in sleep." If more severe, the child will get out of bed, look for objects under it, open drawers and windows, walk downstairs, climb along dangerous parapets impossible to him while awake, and indeed perform almost any action, even dangerous ones, such as getting a knife and stabbing another child. The eyes are wide open, expressionless, and staring. Movements are deliberative and purposive, but intelligence is completely in abeyance and attendants are ignored. A bright light or a sharp order will send him back to bed. In one instance, a boy aged seven, there were hallucinations of "things crawling on the walls." Teeth-grinding is a habit due to similar causes. It is also apt to occur in neurotic and imbecile children. Other motor habits of the same type may be noted, such as scratching the stomach, turning over and kicking about, worrying himself, etc., in the expressive language of the mothers.

These sleep disorders are almost always symptomatic, and therefore the prognosis is excellent, except in so far that somnambulism may persist in those of neurotic ancestry, and may lead to fatal accident, and that the predisposing causes of pure cerebral pavor may be such as in later life give rise to epilepsy, insanity, migraine, tics, neurasthenia, and hysteria. In rare instances imbecility or serious brain disease may be present. Treatment is com-

paratively simple. Give an aperient, attend to the quiet, and regulate the mode of life. Insist on efficient ventilation of the sleeping apartment. Permit the use of a night light, and let a nurse sleep in an adjacent room with the door open. Remove or cure causes of nasal obstruction. Allow no physical or

mental strain. Limit school work to the morning hours. If there is any digestive mischief give a mixture of rhubarb and soda. To prevent recurrence at night give a dose of bromide or antipyrin at bedtime, or give antipyrin in doses of 1-4 grains, according to the age of the child, three times a day.

PRACTICAL NOTES ON DIAGNOSIS AND TREATMENT.

Psoas Abscess and Spinal Disease.

ALTHOUGH rigidity and other objective signs of caries of the spine nearly always exist with psoas abscess, cases are sometimes met with in which the abscess is the only evidence of spinal disease, all other symptoms being wanting.—*Sir Wm. Bennett.*

Diet in Aneurysm.

As regards diet, my own feeling is that you should control the fluids, but not to such an extent as to make the patient uncomfortable. Keep the fluid down to a pint; if less will satisfy without discomfort, give less. Give a generous amount of solids; this, I consider is physiological. But I do not myself see how the starving of people is going to promote coagulation.—*Dr. Goodhart.*

Abdominal Pulsation in Women.

In a nervous woman, the subject of conspicuous abdominal pulsation, the question of aneurysm need hardly be considered. Especially is this true if syphilis can be excluded. Apart from syphilis, women hardly ever suffer from aneurysm, as they are not commonly subjected to the strain to which men are liable.

Dyspnoea in Functional Disease.

A PECULIARITY of the rapid respiration which is sometimes seen in functional disease is that the rhythm resumes its normal frequency during sleep. A patient has been known to have a respiratory rate of 140 per minute, and to be distressed and cyanosed during the day, and yet during sleep to have deep and regular respirations numbering only 16 per minute.—*Dr. A. G. Phear.*

Indigestion.

THE following is presented as a suggestion for the medicinal treatment of indigestion—*R.* Ol. caryoph. mij. , acid hydrochlor. dil. mxx. , tinct. nucis vom. m. , tinct. cardomomi co. 3ij. One dose, to be given in water before food. If there is much pain, add a little spirit of chloroform; if acid eructation, replace the hydrochloric acid by 10 to 20 grains of sodium bicarbonate; if constipation, order also liquid extract of cascara sagrada at bedtime.

The "Blue Line" in Lead Poisoning.

ALCOHOL, arsenic, and perhaps other metallic poisons may cause the same palsy [as lead], but the absence of a line upon the gums excludes lead as a cause on one condition—provided the gums are anywhere separated from the teeth by a space in which there are decomposing albuminous materials capable of yielding sulphur. With perfect gums you can only exclude lead-poisoning by excluding its possible causes, especially by having the drinking-water analysed and by having the urine analysed after iodide of potassium has been taken for a week.—*Sir Wm. Gowers.*

Turpentine as a Hæmostatic.

THE hæmostatic properties of turpentine may be invoked in almost all hæmorrhages from mucous membranes. In bleeding from the gums or from the socket of a tooth, it may be applied locally; otherwise it may be prescribed in the form of an emulsion.

Gastric Crisis in Diabetes.

ACCORDING to Dr. Karl Grube, typical gastric crises, exactly similar to those seen in tabes dorsalis, may occur in patients the subject of diabetes. They may last from an hour up to a day or two, and leave great prostration behind them. The best treatment is large enemata to clear the bowel and hot applications to the abdomen. Such crises are of bad prognostic significance.

Prognosis in Phthisis Pulmonalis.

Do not make your prognosis so much depend on the extent of the local disease as upon the general symptoms pointing to system poisoning. Always remember the enormous importance of preserving the capacity of taking nourishment in tubercular patients; as soon as this fails the condition becomes one of anxiety.—*Dr. Arthur Hall.*

Pityriasis Versicolor.

THE application of a solution of perchloride of mercury (gr. ij. to 3j.) or of sodium hyposulphite (3j. to 3j.) twice daily, and continued for some time after the eruption has disappeared, is usually successful. Another method is thorough scrubbing in a bath with the following: Hydrarg. perchlor., gr. xx.; saponis viridis, 3ij. ; rectified spirit, 3ij. ; oil of lavender, mxx. —*Sir Thos. McCall Anderson.*

The Passage of a Sound.

In middle-aged and elderly men coming under the category of those needing the use of a sound, this should be employed with all the precautions and resources that a comfortable bed, an anæsthetic, antiseptics, and proper precautions afford. If these conditions are not satisfied, the patient runs the risk of such consequences as rigors, high temperatures, a swelled testicle, or cystitis.—*Mr. Reginald Harrison.*

Boric Acid Poultice.

Mix a tablespoonful of cold water starch and a teaspoonful of boric acid with a little water; add the mixture to a pint of boiling water and stir the whole until a uniform mucilaginous mass is formed. When cold spread the jelly thickly on cotton and cover it with a piece of muslin. Then apply to the part. A good plan is to put on the poultice at bedtime and to remove it in the morning. It is useful in acute and subacute skin affections to cleanse and soothe prior to the application of ointments, etc.

THE PRACTITIONER'S RELAXATIONS AND HOBBIES.

GOLF AND BINOCULAR VISION.

By W. C. RIVERS, M.R.C.S., L.R.C.P. (Lond.).

As far as our good friends the laity will allow us, we doctors look for our recreation a great deal to golf. It is a game which can be played at other than stated times, and it does not demand any high standard of physical fitness or training. Perhaps the medical profession has not, as in the case of other games, produced many performers of note, except at least the late Dr. A. J. T. Allan. But if, as one may hope it will not, golf were to oust football from its position as the favourite game of medical students, no doubt the standard of medical golf (not that it is low) would rise.

Someone—a Dr. Eddowes, I think—once tried to show in *Golf Illustrated* a connection between the optical blind spot and the missing of short putts. Here is another bit of applied physiology which has had up to now but small notice. Consider first what would happen if a right-handed golfer with a full, free swing, were suddenly to shut his left eye when he was at the limit of his upward movement, that is, just before he began to come down on the ball. Clearly the ball would be quite lost to him. For at some part of a good swing, with plenty of body-turn, the bridge of the nose is bound to come between the right eye and the ball: in other words, since one begins the swing with both eyes on the ball, there is involved a change (in the middle of the stroke too) from binocular to monocular vision. When the coaches impress the first maxim of the game on their pupils, they forget that they themselves break the letter of it every time they drive. A revised edition for those with full swings would, therefore, be (for right-handers) “keep your *left* eye on the ball.” Now in most people the right is the master eye. For those whose physiology is as rusty as was that of the author, it may be said that the way to find out whether one is right- or left-eyed is to look with both eyes at some small distant object, and then to hold a key at arm's length, so that the object chosen is seen fairly within the hole in the key-handle. In most cases, on closing the right eye, the object will seem to jump away to the right. If it does, the right is the master eye; if not, the left is. This may be confirmed by squinting down one's nose with both eyes: the side of the nose which is better seen is also the side of the master eye. Now, the practical effect of suddenly cutting off the vision of the master eye, of changing rapidly from binocular vision to vision of the subordinate eye only, is in non-technical language, to cause a considerable upset.

But it may be said all this is assumption: no one with a reputation for sobriety ever described similar apparent movements of a golf-ball. And as to the key-ring experiment, if the object jumped out of the ring when the master-eye was closed, why it jumped back just as quickly when this was opened again. The right eye soon gets sight of the ball again, on the down swing; we know that visual impressions may persist after removal of the stimulus: there may thus be no real loss of binocular vision at

all. One or two things make one feel inclined to doubt this reasoning. In the first place there are the great number of shortened swings one sees. A good many men use only half or three-quarter swings. If they have good physical strength not very much is lost thereby: a finalist in this year's amateur championship is described as having only a half-swing. But this good golfer took up the game late, it may be said; lack of boyish elasticity may have something to do with his method. Well, if so, why do many of these players clip their swing only when they have the ball before them, not in light-hearted preliminary practice at daisy-heads? Probably partly because, in order not to spoil all their adjustments, they have at all costs to let their master-eye cleave to the ball. Then there is the way in which most people swing and stand. The common thing, of course, is to stand well behind one's ball so as to swing over rather than away from it, perpendicularly rather than horizontally. And the common thing is generally the easy thing; all first-class players, on the other hand, in reality swing horizontally, or so Mr. Hilton says. Now it is simple to convince oneself by experiment that the right eye comes off the ball sooner when one swings away from it than when one swings over it. Is this one reason why a horizontal swing is hard of accomplishment and therefore rare?

Better evidence is independent proof of a converse case—that a change from monocular to binocular vision is disadvantageous in the case of another ball-game. Mr. Spofforth, the famous Australian bowler, in *C. B. Fry's Magazine*, said that the batsmen he liked to bowl to were what he called “one-eyed” batsmen, those, that is, who presented their profile to the bowler and had in consequence only one eye on the ball as it came up the pitch. They were got rid of so easily that Mr. Spofforth, rather reluctantly giving away a bowler's secret, laid it down that all batsmen should face well round to the bowler, clap both eyes on the ball, and keep them there. Now, in the light of the foregoing, it is easy to see what happened to these foolish “one-eyed” batsmen. As most of them were right-handed, it was the left eye, the one which is generally the subordinate one, which fixed the ball as it left the bowler's hand. When it drew near and the batsman framed to make his stroke, both eyes were used. The master eye (the right) took on the duty of fixing; the left eye then adapted its line of vision to that of the other; the ball, therefore, may have seemed to “jump,” as our object in the key-handle did when the master-eye was opened again—clearly an awkward thing to happen in the case of a bowler of Mr. Spofforth's pace. For the right-handed golfer, or cricketer, the condition of being right-eyed is probably a slight handicap, but is doubtless fairly easily overcome by aptitude or training. Perhaps certain fine drivers are right-handed and left-eyed. [To be concluded.]

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

THE UNITS OF GENERAL HOSPITAL CONSTRUCTION.

THE HOSPITAL KITCHEN.

THE situation of the kitchen and its relation to the other departments of the hospital are matters regarding which various opinions are held. Much depends on the area of the site available. Where this is limited, as is frequently the case in city hospitals, the buildings are necessarily more cramped, and every available foot of ground is utilised. If the site is sufficiently large a detached building is to be preferred, and its situation should be on the level of the basement or ground floor behind the central administrative buildings, or it may with advantage be connected with the hospital by a cross ventilated passage. When the ventilation of the kitchen is carried out by means of an extraction fan, and this cut-off passage separates it from the other parts of the institution, the corridors and the hospital generally should be as free from the undesirable odour of cooking as if the kitchen were on the top story. This situation behind the main buildings and adjacent to a central corridor in the basement running the full length of the hospital and connected with the different floors by lifts, facilitates the efficient and rapid service of hot food to the various units.

ECONOMISING STEAM.

It has been argued that the kitchen must be placed as near the steam boilers as possible, in order to economise steam. There is little to justify such a proposal, for if steam pipes are properly covered and carried in a duct from the boiler to the kitchen, the loss of steam is hardly worth taking into consideration. Calculations recently made give the following results: In an uncovered pipe, 120 ft. long and 6 in. in diameter, 1.3939 lb. of steam condenses per lineal foot per hour, when the pressure of steam in the boiler is 100 lb. and the external temperature 62° Fah. When the pipe is covered only .1747 lb. condenses under the same conditions. In a properly covered pipe, therefore, with a steam pressure of 100 lb., and assuming that 293 lb. of steam is passing through the pipe per minute, the loss is only 1 lb. pressure at a distance of 120 ft. Consequently the question of distance from the boilers has very little practical bearing on the situation of the kitchen, which must be governed by other and more important considerations.

POSITION OF THE KITCHEN.

The kitchen should, of course, be placed in the most central position, and where the site is limited in area the top flat of the central administrative block is much in favour. From here the odour of cooking does not permeate the other parts of the building, and possibly the limitations of the site may leave this the most convenient, and, under the circumstances, the most perfect position attainable.

But there are disadvantages which must be considered. In the first place there is additional cost of construction, because in order to carry the heavy apparatus now universally adopted the walls and floors must be stronger than would otherwise be required. There is, further, the increased labour in service. All food must first be taken up to the kitchen, and taken down again for distribution to the various parts of the hospital. All fuel must be similarly conveyed, and all ashes, refuse, etc., taken down. The distance from the various stores (provisions, meat, milk, etc.) when these are on the basement floor is a disadvantage. Doubtless to a certain extent the resulting inconvenience can be modified by lifts, but where a detached basement site is available the advantages are all in favour of placing the kitchen there.

THE KITCHEN.

The size and shape of the kitchen when in a detached building can be made to suit the require-



THE BOILERS.

ments, and are only governed by these requirements; not, as in top-storey kitchens, by architectural considerations of the understructure to which the kitchen must necessarily conform. When the size is out of proportion to the work to be overtaken, and the shape entails the placing of stoves, steam pans, and other fittings in inconvenient situations, the additional labour and time involved only means increase of staff without any compensating advantage. A kitchen 46 ft. long by 34 ft. wide, with a scullery adjoining, 26 ft. square, is large enough to serve for 700 to 800 persons.

THE COOKING APPARATUS.

The kitchen of an up-to-date hospital will, of course, be fitted with the most modern ranges, stoves, boilers, and steamers, in order that the food may be thoroughly cooked with the least possible expenditure for fuel and the greatest economy of labour. There are so many excellent patterns of

such fittings that it would be an invidious task to make any distinctions here. But many kitchens possessing such excellent fittings have them arranged in such a manner that much of the benefit which might otherwise result is negated. Badly arranged fittings add to the difficulties in working and to the cost of service, and some general principles might with advantage be indicated here under this head.

FITTINGS.

All fittings should stand at least 18 inches clear of the wall. No pipes should be hung on the wall, the steam and water pipes being supported on iron standards, with sufficient space to allow a workman to pass behind them should repairs be at any time necessary. All steam ovens, steam pans, tea infusers, indeed every fitting requiring a steam supply (except perhaps the hot plate or carving table) should be arranged along one side, which obviates multiplication of pipes. Where a range of steam pans is so placed the fitting of alternate hot and cold supply taps on a swivel effects a considerable saving in plumbing. Let us suppose there are eight steam pans. A hot water tap between one and two can, with a swivel mechanism, supply both. A similar cold water tap between two and three supplies both. A hot water tap is then placed between three and four, and a cold water tap between four and five, and so on. The first and last pans have a cold water tap on their outer side. Thus eight pans have a supply of both hot and cold water with nine taps, instead of the sixteen which would be required were each furnished with its own fixtures.

THE STEAM PIPES.

All steam pipes should be flanged and not screwed at the joints, a decided advantage being thus secured in the event of leakage. Screw-down taps for hot and cold water are also to be preferred. Many firms specialise in boiler construction and claim advantages for particular patterns of boilers. Tilting boilers are advantageous for emptying and cleaning purposes, and although the gear may be cumbersome large boilers of this pattern are useful. The objection to the spiket type is the difficulty of cleaning that form of outlet, but it can be quite satisfactorily overcome by having a screw on the outlet level large enough to admit a brush which can clean it thoroughly. Whatever variety is employed, however, it should be jacketed only half-way up. Completely jacketed boilers are liable to cook the contents more rapidly at the top than at the bottom, and boiling over means probably the premature emptying of the pan. Those who have worked with a metal band on the boiler lid will appreciate the advantages of a vulcanite handle on the side of the lid, which is not only handier, but less dangerous in use.

Some hospital authorities provide no coal range, but depend entirely on steam and gas cookers. This, of course, obviates the necessity of coal supply and removal of ashes, but many cooks prefer the coal range with roasting ovens for special purposes, such as the roasting of butcher's meat or the baking of

puddings. Gas ovens will not "brown" fish or a pudding so effectively. But the old objections to gas cookers have now almost entirely disappeared, and if a reliable firm is chosen and a first-class article secured, gas apparatus is found to be useful and economical.

All furnishings, such as dressers and racks for pots and pans, should be on wheels, in order that they may be regularly drawn out from the wall to facilitate cleaning. This avoids any possibility of dirt or vermin collecting. The scullery adjoining the kitchen should be supplied not only with the usual range of sinks for various purposes, such as cleaning vegetables, potatoes, pots, pans, etc., but, in addition, with a special sink or washhand basin for the use of the maids. This is a point too frequently overlooked.

TROLLEYS.

Another advantage is the provision of trolleys to hold the trays for the fish and potato steamers. By this means the trays of potatoes, vegetables, etc., are wheeled to the cookers, representing an immense saving in labour. It will also be found advantageous to have a specially designed wheeled box under the potato and vegetable sinks, which acts as a receptacle for all sand and dirt. The contents of the sink run into this box, in the centre of which is placed an upright, perforated tube. Through this the water flows into the soil pipe, the solids being retained in the bottom of the box, from which they can be removed. Those who have experienced the choking of drains with mixtures of grease and sand can appreciate the advantage of this device.

THE KITCHEN FLOOR.

The floor of the kitchen should be made of some non-absorbent material, the best being Ruabon tiles, which are comparatively cheap, look clean and tidy, and never get greasy or stained. There should be a slight fall on the floor to the side wall, where a shallow gutter should be formed in concrete. Walls should be covered with a hard glazed tile up to the roof. The lighting should be partly from the roof, and the roof light should be principally from the north. Adjoining the kitchen special larders should be provided for milk, vegetables, dripping, cold meats, preparation of pastries, etc. (in Scotch hospitals bread is not baked in the hospital, and therefore a large bakery is not provided), and a housekeeper's store room. The other stores will be dealt with under the storekeeper's department.

The management of the kitchen is carried out by a lady, who should have a complete training in housekeeping and cookery, and be capable not only of supervising the whole of the domestic department, but of giving lectures and demonstrations to nurses on sick-room cookery and household management generally. In addition to the supervising housekeeper, the staff should consist of a head cook, a boiler maid, maid for the coal range, and assistants. All the staff should have their quarters as near the kitchen as possible. The housekeeper's private rooms should be in the same unit, so that all her staff are under her direct supervision.

TWO IMPORTANT METROPOLITAN HOSPITALS.

University College Hospital.

THIS hospital having been rebuilt and modernised, should, in our judgment, take a great step forward by a selection of the best literary and financial brains amongst the Governors, with the object of reconstructing its present financial position. What is wanted is a material change in the methods of action in regard to appeals and literature, which are in many respects quite out of date. It is no use, we are glad to know, in the present day, to continually go to the public with the cry that if more money is not forthcoming certain wards will have to be closed. The public has become so much more enlightened in recent years that it realises that no committee of a great hospital having any claim to be regarded as a business organisation will put down beds on the ground that by so doing they can materially reduce expenses. The shutting up of fifty or one hundred beds in a great hospital will not represent in the year's accounts a saving of expenditure equal to the actual cost of one hundred occupied beds during the previous twelve months. On the contrary, it is very probable that the reduction in fact will not amount to half such a sum, and this knowledge prejudices the giving public against any charitable institution which puts forward a statement of this kind in support of an appeal for further funds. Again, appeal literature nowadays should be made interesting. It is not necessary to write a volume in order to make out a case, but it is essential that typographically, and in a literary sense, all hospital literature to prove effective must be made attractive and interesting. Can any writer desire a more inviting topic than the work of a modern hospital from day to day throughout the year? We doubt it, for we know that a visit to any one of the great hospitals by an expert always brings out some feature of interest which is novel and attractive to the visitor, though he may have had forty years' experience as an inspector of these institutions. University College Hospital is entitled to the warm and generous support of Londoners, and indeed of moneyed people all over the country. It has rendered great services to all classes in the past, its history is full of interest and instruction, and its connection with University College entitles it to the generous support of all who have money to spare and hearts to sympathise with the relief of sickness and disease. We have therefore thought that the best service we could render to this institution, which has languished financially for so many years, is to plainly state that the remedy will be found in the application of new and modern methods on business lines to the financial arrangements and the raising of revenue. Fortunately it is becoming the universal practice to pension hospital officials, so that most of the difficulties formerly presented when radical changes were called for have now disappeared.

King's College Hospital.

THE sixty-eighth report of this hospital is a business-like document, well and clearly printed, and arranged in a novel way. It commences with a subscriber's order form on the bankers, with a polite intimation that annual subscribers are most needed and most acceptable. Then we have the contents; then regulations as to the admission of and visitors to patients, and the form of bequest. Then the personnel of the management and medical staff, and then the conditions governing endowed wards and beds. As to the last we consider that £1,000 to endow a bed, and £500 to endow a cot are amounts which have been fixed far too low, considering that the earning power of such capital sums is less than half the actual expenditure on an occupied bed or cot each year. The report indicates that there has been a decrease compared with previous years in the work of the out-patient department under practically all heads. We congratulate the management on this fact, which constitutes a strong reason why intelligent people should support King's College Hospital and its present management. The character of the neighbourhood has changed, but the work of the almoners' department has proved effective too we are glad to note, and the department is working in very friendly co-operation with private practitioners, six hundred patients having been sent to the hospital by the latter during the year for consultations and private treatment. It is a sound financial reason for removing the hospital to the suburbs that the recent re-assessment has increased the annual expenditure due to rates and taxes by £216. It is pleasant to note that the committee record their thanks to King Edward's Hospital Fund for the statistical returns which have helped to promote economy in the working of the hospital. The services of the late Mr. J. H. Saunders, for thirty-five years steward and clerk of the hospital, are cordially recognised, and it is pleasant to note that the vacancy thus caused will be filled by the promotion of Mr. H. Cheffings, who has been in the service of the hospital for twenty-one years. This hospital needs, deserves and should receive the support of the most intelligent members of that large class of the community who select hospitals as the channel for their charitable gifts. At the annual dinner on Friday the 28th ultimo Mr. Watson Cheyne, one of Lord Lister's house surgeons, naturally and deservedly received grateful recognition. The hospital has very substantial friends, and amongst them Mr. W. F. D. Smith, whose gift of a new site is valued at £62,000. We quite agree with the chairman that the time is far distant when the present voluntary system of hospital support will be superseded, and that, if ever that time should come, the ratepayers will never fail to regret it. It was disappointing that the dinner resulted in a contribution of only £1,400, but the times, as we said last week, are exceptional, and festival dinners are not capable of producing, at the moment, the large sums they have sometimes yielded in the past.

TWO MORE ANÆSTHETIC FATALITIES.

ONLY four weeks ago we considered at some length in these columns some remarks of Dr. Waldo, Coroner for the City and for Southwark, on the question of fatalities during anaesthesia. Since then that gentleman has unfortunately been required to deal with two more such cases, and it is with very considerable amazement that we observe an article in one of the more sensational of the daily papers suggesting in consequence of one of these inquests, that coroners should not be medical men. It is true that this suggestion is said to emanate from a "well known doctor," but anything more preposterous is difficult to imagine than the doctrine laid down "that they" (*i.e.*, coroners) "may be slightly biased by their medical etiquette," whatever that may mean. It is particularly difficult to see why this extraordinary comment should be appended to an account of an inquest by Dr. Waldo, who has for years distinguished himself by the very thorough way in which every death during anaesthesia is investigated in his court. A printed form of questions touching every detail of each fatality is supplied to the anaesthetist concerned, and when returned to the Coroner is carefully preserved, together with an account of the post-mortem findings, verdict, and other particulars of the case.

In his two latest inquests Dr. Waldo has devoted much attention to certain very important points on which wide difference of opinion seems to prevail, and has elicited some interesting information. The cases occurred in St. Bartholomew's and Guy's Hospitals respectively, and resembled each other in that both were cases of emergency (septic meningitis and hæmorrhage from gastric ulcer respectively), and that both administrators are on their respective regular anaesthetic staffs. At the former institution we find from the evidence that chloroform, ether, and the C.E. mixture are used in that order of frequency, and in the proportions of 25, 15, and 6: whereas at the latter the order is exactly the reverse, though the precise figures are not quoted.

At St. Bartholomew's chloroform made from ethylic alcohol is alone used, and the anaesthetist from that hospital, who gave evidence, believes that this form of chloroform, which costs in bulk about 5s. per lb., is followed by fewer unpleasant after-effects, and is safer than that made from acetone. Incidentally, he is reported to have expressed a preference for chloroform over the chloroform-ether mixture. On the other hand, Guy's are perfectly

satisfied with their acetone chloroform, which costs about 2s. per lb. At the last inquest held the anaesthetist, the surgeon, and the hospital dispenser were unanimous on the point. In this connection may be quoted Dr. Hewitt, who under date January 1907, says:—"It is doubtful whether there is any real advantage in practice in employing chloroform prepared from rectified spirit. The author has used methylated chloroform for many years, and cannot satisfy himself that it is inferior to ethyl-alcohol chloroform. He has also used acetone-made chloroform with equally good results. He is forced to believe that there is little or no substantial foundation for much that has been written concerning the importance of this or that brand." The preponderance of opinion and practice among London hospitals and anaesthetists is, in fact, on the side of Dr. Hewitt and of Guy's, and against St. Bartholomew's. We do not gather from the evidence what kind of ether is used at the latter hospital, but at the former it is that made from methylated alcohol, costing 1s. 10d. per lb., as against 2s. to 3s. for that from methylated spirit, and 5s. 6d. for that from ethylic alcohol. The difference in the cost of these drugs when prepared from different sources is, of course, no index of the labour required in the processes, but is due to the heavy duty on ethylic alcohol. All the witnesses expressed agreement with the general conclusion of the Report of the Anaesthetics' Committee of the British Medical Association, 1900, which runs:—"From the evidence before the Sub-Committee they are convinced that by far the most important factor in the safe administration of anaesthetics is the experience which has been acquired by the administrator. In many cases the anaesthetisation completely transcends the operation in gravity and importance, and to ensure success, particularly in these cases, it is absolutely essential that an anaesthetist of large experience should conduct the administration." This embodies a truth so plain that it needs no discussion here; nor does it conflict with any of the points raised in our previous discussion of the same subject. The training and dispersal of as large a number as possible of such "anaesthetists of large experience" is one of the most important functions of the medical schools, and one which they are fulfilling with steadily increasing efficiency. Meanwhile, the thanks of the profession, of the public, and of the medical schools are due to Dr. Waldo for the fair and practical way in which he sets about elucidating to the uttermost every case of these deplorable fatalities.

CONSTRUCTION NOTES.

BOGNOR Urban Council has resolved to spend a sum of £500 to complete the local isolation hospital.

It is proposed to erect a new convalescent home in connection with the Montrose Asylum and Infirmary at Edzell at an estimated cost of £2,000.

A SUM of £5,000 is required for the proposed new laboratories in connection with the Glasgow Cancer Hospital. Only some £1,280 has so far been received.

THE work on the new Manchester Royal Infirmary is making good progress. The out-patient block will be started this month, together with the pathological and septic blocks.

It is proposed to extend and improve the extern department of the Belfast Ophthalmic Institution and Eye and Ear Hospital, which is at present badly ventilated. The suggested alterations are estimated to cost £300.

AN operating theatre, on the latest pattern and thoroughly fitted up, has been added to the West Cornwall Miners' Hospital at Redruth. The theatre, which is tiled in marble, cost £1,500, and attached to it are anaesthetic and sterilising rooms.

THE Committee of the Newcastle Dental Hospital has arranged for a seven years' lease of the present premises, into which the hospital moved in October last. A sum of £300 has been expended on improvements connected with the ventilating and heating systems.

In the annual report of the Glasgow Children's Hospital, the Governors advise against any extension of the institution on its present site. They recommend the building of a large children's hospital to contain at least 250 cots on a new site in the city, and propose to effect certain necessary extensions of the country branch at Drumchapel. The estimates for the new building and proposed extension is £100,000.

NEWS AND COMING EVENTS.

THE next Norman Kerr Memorial Lecture, held in connection with the Society for the Study of Inebriety, will be delivered on the evening of Tuesday, October 8, 1907, by Dr. R. Welsh Branthwaite, H.M. Inspector under the Inebriates Acts.

THE King has conferred the title of "Royal" on the Bradford Eye and Ear Hospital. This institution was founded in 1857 by the late Dr. Edward Bronner, and will this year celebrate its Jubilee. It is now one of the largest special hospitals in the kingdom, and contains 46 beds. During last year 7,270 new patients were treated, 1,091 in-patients were admitted, and 1,084 major operations, including 160 extractions of senile cataract were performed. Since the foundation of the hospital no fewer than 158,848 cases have been treated, and 20,791 major operations performed. The present hospital is too small for the large number of in- and out-patients, and the committee is considering the question of building a large separate out-patient department.

THE Clinical Research Association, Ltd., which has lately moved into newly constructed premises at Watergate House, Adelphi, has signalled the event by the publication of a quarterly, "The Journal of Clinical Research." The new laboratories and offices are in an exceptionally fine situation at the top of a lofty building, whence they overlook South London to the Surrey Hills; they have been designed and fitted up throughout especially for the requirements of clinical pathology, and every detail betrays the most careful adaptation of means to ends. Though the bulkier furnishings are of British make, it is painful to learn that much of the glass work is from France; this is due to the absolute refusal of British manufacturers to carry out special designs invented by the staff to suit the exigencies of their work. System, order, and cleanliness are the dominant features of the work-rooms, and devices abound for reducing to vanishing point the possibility of infection of any of the laboratory staff.

At an inquiry held recently at the Town Hall, West Bromwich, into an application by the Corporation to borrow £800 to extend the borough infectious diseases hospital, it was explained that the present administrative block at the hospital is insufficient for its uses. The accommodation for patients is sixty beds and twelve cots, and under the existing arrangements two nurses have to sleep in a downstairs sitting-room, two in the porter's lodge, and three maids in the isolation ward. Two schemes have been prepared, the first costing £800 and the second £1,000. The Sanitary Committee has adopted the cheaper scheme, and the proposed addition is suggested on the south side of the existing administrative block. The additional accommodation includes on the ground floor three bedrooms, one store-room, and one recreation-room, and on the first floor five bedrooms and one bathroom. It was explained that at the present time the hospital is serving West Bromwich, with a population of over 60,000, and Handsworth, with a similar population, and that the Handsworth authorities have an agreement to send small-pox cases to the hospital for two guineas per week, and scarlet fever cases for 30s. per week. The Government Inspector suggested that the scheme should include a discharging ward, as he considers the present arrangements are anything but satisfactory. It was mentioned that the approximate cost of adding an undressing-room, a small bathroom, and a small dressing-room would not be much more than £100, and the Inspector thought the Council ought to consider the advisability of doing something to improve the discharging arrangements of the hospital.

THE new wing of the East Ham Isolation Hospital, built at a cost of £6,250, has just been opened.

A TOTAL sum of £35,500 has been received to date in subscriptions for the Metropolitan Hospital Sunday Fund.

IN response to the appeal for £25,000 in aid of the funds of the Wigan Infirmary a sum of £4,566 16s. 6d. has been subscribed.

IN the July number of the *Caledonian Medical Journal* Dr. K. N. MacDonald contributes an interesting paper of recollections of "The Medical Giants of Edinburgh in the Early 'Fifties."

THE Medical Committee of the Cheltenham Spa is responsible for an attractive booklet on the merits of the Cheltenham mineral waters. A short introductory chapter gives some interesting historical notes on the Spa. The booklet contains valuable notes on the indications for using the baths and has an analytical table of the waters appended.

THE gas-heated hot-water circulators put on the market last summer by the Gas Light and Coke Company, Horseferry Road, S.W., have rapidly won popular approval, and the demand for them is steadily increasing. They can be fixed quite easily to existing flow and return pipes attached to an ordinary kitchen boiler, and the circulator and boiler can be used either separately or in conjunction.

MESSRS. WILSON AND STOCKALL, Bury, Lancashire, have received official information to say that they have been awarded the gold medal at the New Zealand International Exhibition, for their exhibit of a brongham ambulance. They have also received an order from the Municipality of Rome for one of their first-class accident ambulances, similar to that which they have recently supplied to the city of Milan.

THE difficulties of managing superstitious people are many. As the Hindu population object to killing rats, a Mr. Ram Narazan, a native banker, proposes to provide a "ratruksha," or sort of pen, in which captured rats may be confined as pensioners for the term of their natural lives, the sexes to be kept apart. The suggestion has been received gratefully by Major Buchanan, I.M.S., who is in charge of plague operations in India.

THE new City of London Lying-in Hospital, City Road, was opened on Monday last by H.R.H. Princess Christian. The hospital was instituted in 1750 and was removed to City Road in 1770. The reconstruction and refurnishing scheme has involved an expenditure of about £40,000, towards which only £3,000 has so far been received. This sum was paid by the Central London Railway Company as compensation for constructing their railway tubes so close to the hospital that in 1903 the London County Council condemned the institution buildings as unsafe.

THE next addition to the Oxford Medical Publications, to be ready next week, is "Operations in General Practice," by Messrs. Edred M. Corner and H. I. Pinches. The volume contains upwards of 175 illustrations, and it is meant to be a guide to the general practitioner in the performance of the more strictly surgical part of his daily routine. The first of the seven volumes of Professor Osler's "System of Medicine" is also almost ready for publication. It deals with predisposition and immunity, diseases caused by physical, chemical, and organic agents, by vegetable parasites, by protozoa, by animal parasites, nutrition, and constitutional diseases. It has been arranged that the volume shall be obtainable separately.

NURSING ADMINISTRATION.

THE FEVER NURSE.

THE conditions which prevail in the training of nurses in hospitals for infectious diseases are improving every day, and we are face to face with the paradox that the better the training the more difficult the position of these institutions becomes regarded as training schools. In the Metropolitan Asylums Board Hospitals encouragement is given to nurses to supplement their training by the rule that no charge nurse can be appointed who has not had at least one year's training in a general hospital or Poor-law infirmary. A very large number of probationers, or, as they are called in these institutions, second-class assistant nurses, are, however, received who have no previous experience of nursing. These, after serving two years, are passed on into the first class, and it may be presumed that, since without the year's general training already mentioned they are not eligible for further promotion in the fever hospital, they then leave these institutions, having been three years under instruction as nurses, yet without having received training which would give them a passport to employment either in their own special branch of work or any other. What becomes of them?

The Metropolitan Asylums Board has close on 5,000 beds in the fever hospitals in addition to about 2,000 beds for small-pox, and 2,500 beds for convalescing cases. Taking into consideration that the small-pox hospitals are happily only in partial use, and that in the convalescent hospitals the nursing is light, it may be computed that there are at least 1,000 assistant nurses or probationers in training in these institutions. The very size of the buildings renders the nursing administration both difficult and interesting, and the services of able matrons exercised in the best hospital methods are readily secured. The most exact discipline is essential, not only on account of infection, but also on account of the very mixed population gathered within the walls. The training is thus of real value, and the probationer who has served two years in one of these hospitals has been thoroughly well grounded, and is a very different person in the wards to the raw probationer whose position she is, however, expected to take, should she desire to complete her training in a general hospital.

It is growing more and more difficult for nurses to procure without payment a year's training in any general hospital, nor are the Poor-law training schools at all more ready to introduce probationers for a year's course. It may be feared that many probationers drift into private nursing, and form the stock-in-trade of the smaller nursing agencies of whose misdeeds we hear so much. The evil is, as we have said, rendered regrettable from the fact that the training so far as it goes is now generally of a very high order, and attracts a good class of probationer. It is admittedly so essential to the formation of a thoroughly trained nurse that it is usual for nurses aiming at private work to supplement their general training by a course of fever work. Why

should not co-operation be possible between the general hospitals and the fever hospitals by means of which fever training could be made part of the three years' course and fever nurses be received in place of the fever pupils to receive general instruction? This is no wild imaginary scheme. It has been tried and found eminently practical and satisfactory by an old-established training school of well-deserved reputation, that of the Royal County Hospital, Winchester. The plan there in force is to keep a second-year probationer for six months at the Borough Hospital, Croydon, to receive instruction in fever nursing, while from Croydon one nurse is received who gets a year's training in general nursing at Winchester. It will be seen that for every nurse who is trained at Winchester, two probationers can receive six months' fever training at Croydon, the fever hospital paying salaries to these pupil nurses. The plan is found to work excellently in all respects.

The probationer, after her change of work, settles down again contentedly among her old companions, aware that she is well on the road to become a useful member of the private staff, while the advantage to the fever nurse needs no enforcing. Care is always taken to select promising probationers for these exchanges, and the prospect of being chosen for the position of honour works as an incentive to effort. The plan has, indeed, proved so advantageous that it has been expanded so that pupils are exchanged between the National Hospital, Queen Square, and the Winchester Hospital, for six months at a time, while at the Southampton Eye Infirmary a pupil from Winchester is often received also for three months' special training.

There can be no doubt that this system entails a good deal of thought and care on the part of the matron if it is to be a success. It also demands the power of appreciating the value of other people's work and methods. Those who never look into the households of their fellow-workers without disparaging their labours, would deem it deplorable that any probationer should pass away from under their direct influence during the time of training. But mutual comprehension and mutual trust should do much to destroy this feeling of suspicion with regard to other hospitals, and, carried out under proper precautions, the system of exchanges can but result in widening the minds of pupils and superintendents alike. It tends to promote just that sense of cordial co-operation which is sadly lacking, as a rule, among the heads of institutions, and to introduce a welcome variety into the training of the smaller general hospitals. As a solution of the problem what to do with the half-trained fever nurse, its value is incalculable. The only way in which the weak links in the present training system can be strengthened is by interdependence among hospitals presenting different varieties of nursing experience, and every attempt in this direction is to be welcomed.

THE COMMON TASK.

Correspondence and Queries for this section should be sent to the Editor of THE HOSPITAL, 28 Southampton Street, Strand, London, and marked "Nursing Administration."

LOW CONTRACTS.

An acute hospital secretary was heard to murmur the other day, "This is what comes of cutting prices. The Board insisted on accepting the lowest contract for painting the walls, and now the builder is using Russian turpentine; I can smell it in the air." How many people responsible for the annual cleaning of institutions are able to detect the odour of Russian turpentine, or are acquainted with the reason why it ought not to be used?

FOR THE GLORY OF GOD.

The chapel is a familiar feature in most hospitals of any size, but it does not always take its proper place in the life of the household. Too often there are but two or three dullish Sunday services at which the staff reluctantly put in an appearance, greatly preferring the freedom from every-day associations which they can get in a church outside the walls. When it fulfils its highest function the chapel sets the tone of the household, and helps to dignify the commonest tasks. The ten-minute service at St. George's, held before the nurses go on duty in the morning, is an admirable example of what can be done even under difficult circumstances to sustain the highest aspects of the work; for the Nurses' Home is over half a mile from the hospital, and thus the daily early gathering is not achieved without some zeal, yet is appreciated all the more, perhaps, on that account.

PROBATIONERS AND LOCALITY.

The theory that probationers should only be accepted from the town or county in which the hospital is situated, overlooks the impulse which urges people to go as far afield as possible for training or advice. The Scotch woman will come to England, the Londoner will go to Birmingham, the Irishwoman to Scotland. Inquiry shows that only as rare exceptions do inhabitants of provincial towns select their own hospital for their training school, and the reason may be that they believe higher esteem will be accorded to them among their friends if the brand of an unknown and presumably superior institution can be obtained. It has its advantages, for the complete change of outlook and habits which is involved in the process of being trained for a nurse is undoubtedly best carried out at a distance from anxious relatives, and when home ties can for the moment be completely severed.

THE STOCK-POT.

It is quite certain that in hospitals where there is no stock-pot a great deal of valuable food finds its way into the pig-tub. From the moment when the cook begins her operations to the moment when the dinner is over, and the food which remains over is collected from the dishes, there are stages in which odds and ends of good victuals are liable to be wasted, unless a use can be found for them. The stock-pot should be of sufficient size to contain the leavings of two days, with an adequate proportion

of water to cover its contents. It may be used as a receptacle for all the trimmings from the uncooked meat, including bone and fat. To this may with advantage be added pieces of gristle and skin left after carving diets, and lastly the well-chopped bones of certain joints which it is impossible when carving to free entirely from the meat. Also all carcasses of fowls, etc. On no account, however, should the leavings from the plates be made use of in this way, even when they have obviously not been touched. It is better to exclude all vegetables from the stock-pot, as they are fertile sources of fermentation or sourness. The pot should be kept constantly simmering, with a close lid, so that the loss by evaporation is kept under, and the liquor should be poured off every evening into a covered vessel, to be strained and skimmed the following morning. When mutton is bought in carcass, quite sufficient material for broth will be provided by the spare portions, unadapted for table use, without buying shin of beef. The best kind of stock pot is fitted with tap and strainer.

DISTRICT NURSES AND COMMITTEES.

It is extremely unusual to hear of disagreements between private nurses and medical men, and such a thing is almost unheard of in institutions. For this reason the not uncommon instances which reach our ears of disputes arising in district work in the country gives rise to the surmise that there may be something unsatisfactory in the organisation under which the district nurse does her work. In several cases the fault can be traced directly to the interposition of the committee. However necessary a committee may be for raising funds and checking expenditure, its functions as intermediary between the doctor and nurse are a very doubtful advantage. Great discretion is needed. It is not always quite clear that this discretion is exercised. Many medical men dislike exceedingly the feeling that the conduct of all their cases among the poor is discussed at a weekly meeting of ladies empowered to inquire into every incident in the nurse's daily routine. The more interest the committee shows in the condition of the village invalids, the more mischief is likely to come of it. The causes why Mrs. A. was so slow in getting well of her confinement, and why old B. died suddenly when the doctor had omitted his usual visit, will make enough talk in a small village to cause the doctor to vow he will never have another nurse in the place. He knows his own business, and certainly is not called upon to explain his action to a group of ladies, however benevolent. He may be pardoned for feeling that the less they know about his cases the better; yet what nurse can withstand the influence of warm appreciation coupled with curiosity? Conceive the position of a parson, whose church workers held a weekly meeting for the purpose of interrogating the lay helper as to his daily doings. Must not friction be set stirring by such intervention, however kindly meant?

EDITOR'S LETTER-BOX.

ASTHMA POWDERS.

SIR,—I have published several formulæ for asthma powders, and I have read with much interest your useful article upon such medicaments in the issue of THE HOSPITAL for June 15. There is, however, a sentence in that article which seems to be in need of qualification. It is, "Almost all asthma powders contain potassium nitrate, the purpose of which is simply to ensure a continuous lively smouldering of the lighted mixture, with evolution of abundant fumes; most of the powders contain either lobelia or stramonium, or both; these are the source of the active anti-spasmodic principle given off in the fumes." Now it appears that the fumes produced by the deflagration of saltpetre with vegetable fibre are prominent amongst the active anti-spasmodic principles which are given off in the smoke of the burning of an asthma powder containing that salt. The efficacy of such fumes, as used with benefit in spasmodic asthma, and as employed alone in the burning of touch paper, has long been recognised by the profession, and were described by Pereira under the names of inhalatio nitrosa and fumigatio nitrosa more than fifty years ago.

Yours faithfully,

JAMES SAWYER.

Birmingham, June 25, 1907.

HOCK AND MOSELLE.

SIR,—My letter to you, as published in to-day's HOSPITAL, read with your editorial comments, appears to convict me of not knowing that "Ch. Smith-Haut-Lafitte" is a Red Graves. Few people, I venture to say, reading my letter as I wrote it and you received it, would take that view. I would ask you, as a matter of courtesy and fairness, to acquit me in your next issue of this lack of elementary knowledge of my own business, which I am ready to believe has been imputed by you under some misapprehension, and which none of my many friends in the trade would credit me with.

I referred in my letter, by implication, to the wine which in your statistical table on page 288 follows "Ch. Margaux"; I could not be expected to know that you meant "Ch. Smith-Haut-Lafitte," or, naturally, should not have spoken of it as a Médoc growth. It would, I readily allow, have been better to have referred to it as a Bordeaux wine, on the assumption that by "Ch. Haute Lafite" you might mean "Ch. Smith-Haut-Lafitte."

Yours truly,

ROBERT GRAY.

6 Moorgate Street, London, E.C., June 29.

General Practitioners' Contributions.

Important.

We propose to devote a special page to General Practitioners' Contributions. We therefore invite from practitioners contributions based upon their experience in the management of cases, and in the treatment and diagnosis of disease; especially shall we be prepared to welcome articles dealing, practically, with treatment, and with the use and value of new remedies and methods.

No article should exceed 1,100 words in length, and, if accepted, one guinea will be paid to the writer after publication. Each communication should be accompanied by a stamped directed envelope for the return of the MS. if found unsuitable.

The Relaxations of Medical Men.

We shall also be glad to pay for accepted contributions, from any member of the profession, on the subject of the relaxations of practitioners. This opens up a wide field, as it includes natural history, photography, sport, indoor recreations, and motoring. Whenever possible, original illustrations and photographs should be sent with the MS.

Suggestions Invited.

The Editor will welcome suggestions for the establishment of any new section in THE HOSPITAL, and will be glad to supply information on any subject of interest or importance to members of the profession in any part of the world.

Notices and Answers to Correspondence.

All MSS., letters, books for review, and other matters intended for the Editor, should be addressed to THE EDITOR, The Hospital Building, 28 and 29 Southampton Street, Strand, London, W.C.

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The Hospital

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NEW SERIES. NO. 16, VOL. I. [No. 1088, VOL. XLII.]

SATURDAY, JULY 13, 1907.

THE UNIVERSITY OF LONDON AND THE SOUTH KENSINGTON INSTITUTE.

AT the meeting on Friday, June 28, the Faculty of Medicine of the University of London again expressed an opinion adverse to the proposed Institute of Medical Sciences at South Kensington.

It will be remembered that, at the recent Senatorial Election, Drs. Hill and Caley were elected representatives of the Faculty in place of Professor Rose Bradford and Dr. Kingston Fowler, the election having been fought solely on the question of the proposed Institute. It was considered desirable that in view of this election the situation should be reconsidered by the Faculty, and a special meeting was summoned for the purpose, at which there was an attendance of about 150 members. A resolution was moved by Dr. Leonard Hill to the effect that in view of the inadequate response to the appeal for the proposed Institute of Medical Sciences, of the incorporation of University College, the impending incorporation of King's College, and the published decision of four of the medical schools not to participate in the scheme of concentration at South Kensington, the Faculty was of opinion that it was no longer desirable to proceed with the scheme for the institution of a third centre for the teaching of Preliminary and Intermediate Medical Sciences at South Kensington. This was seconded by Dr. Caley, and after considerable discussion was carried by the narrow but effective margin of 77 to 72. The debate, though it never reached a high level, was instructive as crystallising, in a manner which has not been done before in public, various conflicting ideas with reference to the particular scheme which has lately been adopted by the University as its policy.

It was evident from the speeches of Dr. Norman Moore, of St. Bartholomew's Hospital, and Dr. Turney, a former Dean of St. Thomas's, that, as has been previously mentioned in *THE HOSPITAL*, the original scheme which attracted very many members of the Faculty of Medicine of the re-constituted University was that of a single institute, which should be neutral to all medical schools, and the erection of which would have been followed by the abandonment of the teaching of Preliminary and Intermediate Medical Studies at both University and King's Colleges.

The present opposition to the Institute at South Kensington is the direct result of the Senate having so far departed from this original idea that University College was allowed to be incorporated as a school of the University with the express stipulation in its Act of Incorporation that the teaching of Preliminary and Intermediate Medical Studies should be retained. This has altered the whole complexion of the situation, and it was very evident from the speech of Dr. Turney, who supported Professor Starling in an amendment recommending the University to proceed with the scheme, that University College and King's, from their intimate and long-standing association with hospitals, could never be regarded seriously as possible centres by medical schools which might wish to abandon their early teaching. The staff of St. Thomas's Hospital were, therefore, in favour of the South Kensington Institute being proceeded with, as they wish to relieve themselves of a certain amount of teaching which is proving a heavy financial burden to them, and they cannot do so until a neutral institute such as that proposed at South Kensington is provided.

Dr. Spriggs, representing St. George's Hospital Medical School, which has already "concentrated," made a clever speech from its point of view, and informed the Faculty that St. George's Hospital had only consented to send its students to University College or King's on the strength of an assurance from the University that the Institute of Medical Sciences at South Kensington was part of the fixed policy of the University, and he stated that, should this Institute not be proceeded with, the University would be guilty of a breach of faith towards it. We should feel inclined to doubt whether the Senate has ever given an assurance in these terms to St. George's, but even if it did, it may, on the other hand, if it persist in the three centre scheme, render itself open to a charge of breach of faith with many other of the medical schools who have refrained hitherto from expressing any definite opinion thereon, as they, relying upon an assurance made in 1901, were expecting to be consulted before any definite scheme was adopted as the final policy of the University. However, whether the University is committed in any way

to St. George's Hospital or not, it seems evident that, with two definite expressions of opinion within six months, hostile to the proposed centre at South Kensington, it will be impossible to proceed with it; the Senate has probably already realised this, for it has re-committed the consideration of the scheme to an Institute Committee, who are empowered to consult the Schools. This action, though taken somewhat late in the day, is what the University should have done before University College was incorporated, and before the idea of a single centre was abandoned. Had this course been followed,

the Senate would have been saved its present rude awakening.

It seems desirable that the Faculty should at an early opportunity recommend to the Senate that, if possible, no action should be taken with reference to the concentration of medical education in the University without the Faculty of Medicine being first consulted. In this way, whether the Senate accepts the recommendations of the Faculty or not, it would at any rate be able to keep itself in touch with general opinion in the medical schools of the Metropolis in a way which it has hitherto failed to do.

THE IMPERIAL CANCER RESEARCH FUND.

THE annual meeting of the general committee of the Imperial Cancer Research Fund may suitably be made the subject of a few general comments. And first may be noted the fact that the meeting was held at Marlborough House and under the chairmanship of the President, H.R.H. the Prince of Wales. The medical profession, and indeed the general public also, have learned from a long and convincing experience that no sound scheme for the alleviation of suffering and for the diminution of disease appeals in vain to the sympathy and practical wisdom of his Royal Highness. The heir to great and stimulating traditions in connection with such appeals, the Prince has ever proved himself worthy of the noble example set by King Edward, and has extended generous and large-hearted recognition and assistance to all efforts "for the relief of man's estate." Nor will it be forgotten that this attitude is associated with an active and sustained interest in such efforts. It is no mere academic approval and patronage, but a gift of personal service, that prompts the general conviction that where his Royal Highness leads, all may rely both upon wisdom in design and thoroughness in method. It is under a guarantee of this order that the Imperial Cancer Research organisation has pursued, and will continue to pursue, its great and responsible task.

A second feature which marked the recent meeting was the intimation of a number of handsome contributions to the fund, without which continuation of the work would be impossible. And here again the efficacy of the President's interest is seen in the announcement of a gift of £1,000 from an anonymous donor. Naturally and inevitably, too, special recognition must be offered to the splendid and munificent donation of £40,000 contributed by Mr. and Mrs. Bischoffsheim. At the very initiation of the fund Mr. Bischoffsheim gave a sum of £5,000, and was, indeed, one of three original donors by whose generosity the commencement of the work was made possible. He has now in the most practical fashion recorded his conviction of the

value and promise of what has already been accomplished, and his anticipation of what is further to be gained. The same may be said of other contributions, as, for example, those from certain of the City Companies and Colonial Governments. Welcome as such gifts are to meet the practical necessities of the position, they carry in addition an expression of confidence in the scheme and methods which the Fund has brought into operation. And these, it must be remembered, are framed with a determination to secure scientific thoroughness and accuracy. In the very nature of the case, therefore, the progress of the research must be slow, and from those unaccustomed to the patient and orderly investigation of obscure and complex biological problems, some expressions of impatience might not have been altogether singular. It is thus all the more gratifying to observe that those who are accustomed to deal with practical affairs and with large commercial undertakings, are not less willing than members of the medical profession to demonstrate their confidence in the sure, even though slow, movement of laboratory investigation. If this is stopped, the work of cancer research ceases, and save for the chance of some fortunate and penetrating inspiration, of which there can be no reasonable anticipation, the prospect of unlocking the secret and effecting the cure of malignant disease comes to a compendious end. This aspect of the matter cannot be presented too emphatically or too often. Whatever criticism on points of detail may be advanced—and there is not the slightest desire to restrain such criticism—the broad fact remains that it is in the application of the scientific method to the problem of cancer that the hope of humanity for rescue from a cruel fate at this moment resides. That application is already in force. To sustain and continue it without money is impossible. It is, therefore, to be hoped that the further sum of £13,000 needed to place the Fund in a secure position will not long be lacking.

ANNOTATIONS.

Sir James Barr on Physical Deterioration.

SIR JAMES BARR is nothing if not robust and thorough, and his recent address, as president of the preventive medicine section of the Royal Institute of Public Health, gives us further evidence of the qualities to which previous experience of his utterances had introduced us. In vigorous fashion Sir James criticised the work of the sanitarians, whose comparative failure he attributed to a too exclusive attention to the prevention of zymotic diseases and to the preservation of life. The ambition of sanitarians and medical practitioners alike should be the improvement of health, and the public, were they alive to their own interests, would pay their medical advisers for directing them in the ways of health rather than for mere attendance and advice during the presence of disease. There is a great deal of ill-health which deserves not sympathy or pity, but criticism and condemnation; and a worship of good health, including works as well as faith, might with advantage be made a feature of the national religion. To return to Sir James Barr's address, we find he would encourage from early youth upwards the best means of developing the moral and physical grit of the nation. Every child under sixteen years of age should as far as necessary be fed and cared for by the State. The aged should be supported by a tax placed on multi-millionaires. The decline in the birth-rate and the high death-rate in early infancy are both capable of being largely met by State interference. Our sailors should be encouraged to marry, and suitable provision should be made for their wives and children. These—and they do not exhaust the catalogue—are vigorous proposals, but, details apart, it will be recognised that their boldness carries the vote of the earnest and thoughtful reformer.

The Society of Tropical Medicine and Hygiene.

SIR PATRICK MANSON, in delivering his inaugural address as President of this newly founded Society, gave a most interesting and instructive sketch of the wonderful advances made in the investigation of tropical diseases during recent years. Certainly the record which will have one day to be added to the history of medicine will mark the later part of the nineteenth century as the date of the commencement of a great and striking development. Even in an authoritative work published in 1893, the chapter on malaria contained not a single word on the mosquito as an agent in the diffusion of the disease. Now that the mosquito is recognised as the sole medium by which distribution is effected, and an enormous stimulus has been given to the study of the part played by insects in the carriage of disease germs. In reference to sleeping sickness, this is recognised as the terminal phase of a trypanosoma infection, and the cause of the sleep is known to be an infiltration of the lymphatic spaces of the brain by certain small mononuclear cells; in addition, it is known that the tsetse fly conveys the disease, and that arsenic, mercury, and certain dyes exercise some degree of control over the symptoms.

Another advance has been the discovery that the larval ankylostome obtains access to the intestinal canal by penetrating the skin. As indicating the important part played by them in the spread of disease, Sir Patrick stated it is necessary to have knowledge of some 600 species of mosquitoes, not to mention the ticks, tsetse flies, and other less-important blood-suckers. Attention was also drawn to the encouraging attitude adopted by the British and other Governments towards work in tropical medicine, to the value of international conferences, and to the need for a society such as that now founded, by which further progress could be both advanced and communicated.

Guy's Hospital Medical School.

THE annual distribution of prizes to the students of this school took place on the 6th inst., when Mr. Cosmo Bonsor, the Treasurer of the Hospital, presided. The report of the Dean (Mr. H. L. Eason) presented a number of gratifying features. Especially is it satisfactory to note that the entry of students for the academic year was the highest for the last thirteen years, the entrants for the full curriculum numbering ninety-two. Another announcement of interest was that relating to the pathological department. A vacancy having occurred in the lectureship in pathology, it has been determined to reorder the conditions of the appointment, and to arrange that the new lecturer shall give the whole of his time to the teaching and laboratory work. This, it will be recognised, is a step in the right direction. The demands of modern pathology and the increased association of the subject with clinical work render it imperative, if the routine work is to be adequately discharged, and still more if original observation is to be developed, that the officer in charge shall give his undivided attention to his duties. Guy's is fortunate in possessing an endowed lectureship of experimental pathology, and this has been generously placed at the service of the school by the founder, Mr. Robert Gordon. With this help the Treasurer has been able to establish a Gordon Lectureship of Pathology, to which a salary of £500 per annum will be attached. In view of the sums paid in some of the non-Metropolitan schools for similar duties the income cannot be called excessive. Still, it is a distinct advance, and we cordially congratulate the authorities on this development in the school. Attention is also drawn in the Report to the fact that though the curriculum has become both longer and more complex the inclusive fee remains without change. To advance that fee is recognised to be impossible, because the average income to be made from the practice of medicine does not justify it. That, indeed, is an aspect of medical education which cannot be neglected. And sooner or later it will carry consequences for the public. For it is hopeless to contend against economic forces, and unless a more adequate return is possible a certain proportion of those who propose for themselves a medical career will be deflected into other callings.

MEDICAL OPINION AND MOVEMENT.

A LITTLE time back we referred in these columns to the debate which took place at the Congress of Medical Practitioners in Paris this year on the question of doubling the rates of charges for medical attendance on Sundays and holidays, in order to secure more certain rest for medical men from their labours on these days and put a check upon needless calls for their services. We understand now that the Medical Syndicate for the Department of the Rhone has already given practical effect to the resolution passed by the Congress in favour of such a measure, and has issued a notification to the public that from July 1 fees for visits and consultations on Sundays and holidays will be fixed at double the usual rate.

AMONG those who have been the recipients of honours on the occasion of the celebration of the King's birthday there are 14 medical men, 10 of whom are members of the naval or military medical services. The honour of knighthood has been conferred upon Mr. Henry Rosborough Swanzy, F.R.C.S. Irel., and Mr. Alderman Thomas Boor Crosby, M.D., F.R.C.S. Eng. Sir Henry Swanzy is President of the Royal College of Surgeons in Ireland, and late President of the Ophthalmological Society of the United Kingdom. He is surgeon to the Royal Victoria Eye and Ear Hospital, Dublin, and also to the Adelaide Hospital, Dublin. His contributions to the literature of ophthalmology are numerous, and he is a well-known authority in that branch of the profession. Sir Thomas Crosby is a Sheriff and Justice of the Peace for the City of London. Sir William McGregor, K.C.M.G., C.B., Governor and Commander-in-Chief of Newfoundland, has been promoted to a Grand Commandership of the Order of St. Michael and St. George. He graduated M.D. at Aberdeen, and held resident appointments at the Glasgow Royal Infirmary and at the Royal Lunatic Asylum, Aberdeen. He then became assistant medical officer in the Seychelles and chief medical officer in Fiji, and afterwards held many distinguished colonial official positions. Professor Edwin Ray Lankester, F.R.S., Director of the Natural History Museum, who has been made a Knight Commander of the Bath in recognition of his services in the interests of science, though not a medical man, also deserves mention in these columns.

THE mercurial treatment of syphilis by intramuscular injections, either of metallic mercury or of its salts, has become much more extensively used in recent years, owing largely to the improvements in technique, by which previous troubles, such as painful nodosities, abscesses, and embolism, have been to a great extent avoided. The method has been especially advocated and adopted by French syphilologists, and it has been clearly demonstrated that patients can be brought under the influence of the drug with greater rapidity and certainty than by any other method. The soluble and the insoluble salts, as well as metallic mercury in suspension (*l'huile grise*) have been employed for the purpose, but it is generally admitted that the soluble salts are not so efficacious, and the injections must be

repeated at frequent intervals. Calomel and metallic mercury are by far the most energetic forms of the drug, but their use is accompanied by a greater or less degree of pain. The metallic mercury causes much less inconvenience, but its suspension in a suitable vehicle for injection has been a question of some difficulty. Colonel F. J. Lambkin, of the Military Hospital, Rochester Row, claims to have solved these difficulties by using palmitin as a base and adding as an analgesic equal parts of absolute creosote and camphoric acid. The mercurial cream thus formed should contain 10 per cent. of mercury and 20 per cent. camphorated creosote. The calomel preparation is made up only half that strength. We understand that these creams can be obtained from Messrs. Oppenheimer in aseptic containers each a maximum dose of 15 minims.

MEDICAL men have always been ready to offer their services wherever they were needed, regardless of compensation when adequate remuneration was not forthcoming. In this way has arisen all the gratuitous work carried out by the profession at hospitals and medical institutions, and the medical attendance in connection with dispensaries and friendly societies at unremunerative rates of compensation. All these things have been arranged largely in the name of charity, but the profession is now exposed to the danger of being taken at their own valuation; and the actual commercial value of their services estimated on the same low scale. The recent action of the Westminster Borough Council in regard to the provision for the medical attendance of their employes is a case in point. Hitherto a workman, in case of illness or accident, has been required to furnish a medical certificate weekly from a district medical officer appointed by the Council in order to obtain his sick pay. The cost of these certificates (2s. 6d. each) has been borne by the Council, and has amounted to between £200 and £300 per annum. A joint sub-committee of the Works and Highways Committee, appointed to determine the best means of meeting the Council's responsibilities under the Workmen's Compensation Act, reports that the average sum paid by friendly societies for medical attendance, medicine, and certificates amounts to 4s. per man per annum. It is proposed, therefore, that this would be an adequate rate of payment for the Council's workmen within a three miles' radius of the City Hall, and that a further 2s. per head should be paid for those beyond this radius. In this way it is reckoned that their 1,000 employes will be provided for at a cost of £225 per annum. In other words, the ratepayers' money is to be spared in this instance by exploiting the doctor. Such a scheme is not only unfair to the doctor, but also to the employe. No medical man can possibly give adequate time and attention to his patients on such a low scale of remuneration. In this case there is not even the plea of charity. It is a purely commercial transaction, and we can only hope that the Council will not succeed in obtaining the services of the profession on such a basis.

HOSPITAL CLINICS.

CEREBRO-SPINAL FEVER.

By F. M. SANDWICH, M.D., F.R.C.P., Consulting Physician to Kasr-el-Ainy Hospital.

(A Lecture delivered at the Medical Graduates' College.)

WHEN I was invited to give a lecture in this College and to choose my own subject, I naturally tried to think of some question which I had had the opportunity of specially studying abroad, and which at the same time might have more than an academic interest for those whose routine work is confined to this country. I eventually decided to address you upon the question of cerebro-spinal fever, because, though I cannot pretend to any very profound knowledge of that disease, I have had the advantage of seeing several cases in Egypt and of visiting various hospital wards in the United States when the great epidemic was prevalent there two years ago.

Last year I might have hesitated to address you on this subject, because the disease then seemed to be an exotic from which these islands were unusually free, but now that our few sporadic cases have developed into local outbreaks the position is changed, and it behoves us all to have some intimate knowledge of a malady which we may meet with any day in our ordinary work.

I cannot tell you how many people in Scotland have suffered from this disease this year, but I should like to point out that, whereas in the first quarter of 1906 there were no deaths reported from this cause in the eight principal towns, which represent 38 per cent. of the whole population of Scotland, there were 393 deaths during the first three months of 1907. As many as 312 of the deaths occurred in Glasgow (where a few fatal cases have occurred every year since 1903), besides smaller numbers in Edinburgh, Leith, Paisley, Dundee, and Greenock. The number of deaths is gradually rising, for in January there were only 74, in February 140, and in March 179. The number I have quoted, 393, represents an annual death-rate of 88 per 100,000, being by far the highest death-rate from any acute infectious disease in Scotland, the next on the list this year being whooping-cough.

For Ireland I cannot give you similar figures, but I find in the first quarter of last year no mention at all of cerebro-spinal fever in the registrar's reports; but, on the other hand, during the corresponding three months of the present year cerebro-spinal fever has been recorded in 25 districts, a number only exceeded by one acute infectious disease, for it appears that whooping-cough was present in 27 districts. According to Surgeon-Colonel Flinn the annual deaths from cerebro-spinal meningitis since 1881 have varied from 50 to 133.

The detailed analysis of the death registers for England and Wales for the year 1906 is not yet completed, so that I cannot give you any comparison for this portion of the United Kingdom, but we have all noticed in our weekly medical journals paragraphs referring to the existence of the disease. I find, however, that in London there have been five deaths

during the first 13 weeks of this year, and that no less than 13 cases were notified between March 12th, when cerebro-spinal fever was made a compulsory notifiable disease in London, and March 30th of this year. These figures, taken from the official records, though necessarily very incomplete, are sufficient to show you that the disease is lurking around us in many localities.

A NOTE ON ITS HISTORY.

It is now about a hundred years since there appeared in certain parts of France and Italy a form of epidemic disease which the medical men of those countries failed to recognise as belonging to the various groups of fevers then known. Shortly after, the disease was noted in Algiers, to which country it had doubtlessly been carried from France, in the United States, Denmark, and elsewhere. When once its distinguishing features had been pointed out, the disease was soon found over a large part of Europe and at a number of new points in Asia, Africa, and South America. In some of these places there developed widespread epidemics (especially in the United States), which were called "sinking typhus" or "spotted fever." Other names which have been given to the disease are "cerebral typhus," "malignant purpuric fever," "petechial fever," and the one by which most of us know it best, "epidemic cerebro-spinal meningitis."

In some countries sporadic cases are still confused with typhus, so that it is a pity to continue the use of the term "spotted fever," especially when we remember that in many cases of cerebro-spinal fever there is no eruption at all.

It is difficult to tell why the British Isles have, until now, been so free from the disease, for in France and Germany there have been many epidemics, especially among soldiers in barracks. Again, in Denmark, Sweden, Russia, Italy, Sicily, and Greece there are a certain number of cases every winter, and occasionally from them epidemics break out. In hot countries, such as India, it is often the prisoners in gaols who are attacked; and in certain prisons there have been many repeated outbreaks, pointing to local place infection. In Africa it seems certain that the fever has often occurred, though it has usually been called typhus. From Egypt, the Soudan, and Nigeria records are known, and it may interest you to be told that the Mahdi, whose troops killed General Gordon at Khartoum, is believed to have died of this disease, though it was called small-pox at the time by his adherents, who were not possessed of any medical knowledge. In South Africa there are many accounts of this trouble in Natal and in Cape Colony. But North America has really been its headquarters, both as regards prevalence and

severity of the disease; for several years it has ranged from Canada to the Gulf of Mexico, and from the Atlantic Ocean to the States of Minnesota and Iowa. It has been said that the fever is so often met with in Alaska that it must be reckoned with as one of the dangers of gold mining in that inhospitable region.

THE EPIDEMIC FORM.

The epidemics which distinguish this disease from other forms of meningitis vary widely both in their extent and intensity, and in several instances the outbreaks are of so limited a nature, the disease attacking a mere handful of people, that the word "epidemic" is out of place in connection with them. With the exception, perhaps, of Glasgow, these are the outbreaks which are now going on in the United Kingdom.

It has often been noticed that the epidemics are curiously irregular in their relations both to space and time. Instead of sweeping through a country, like influenza, for instance, they rather tend to occur as a number of isolated outbreaks, here and there, in different parts of the country, the separate outbreaks showing little or no relation to each other; and with our present knowledge it is often impossible to trace any connection between them. So, too, an individual outbreak often shows no definite course; a local epidemic may smoulder on for months, and may recur at irregular intervals in the same district or village, showing that the infection is endemic for the time being in that particular spot. This tendency to recur seems to show that the poison of the disease can exist for a short time outside the human body.

Although there cannot be many people of our own generation who have seen many cases of the disease in England until lately, I may remind you that history relates several groups of cases scattered about England, Scotland, and Ireland; for instance, on Dartmoor, in Sunderland, Liverpool, Rochester, Lincolnshire, Oxford, Birmingham, and several villages in Norfolk and Suffolk. Again, there have been many cases in Dublin, Belfast, and other parts of Ireland, and in 1865 and later the epidemic was so fatal and so often accompanied by dark-coloured eruptions that the name of "black death" was at one time proposed for it.

During the last thirty years several cases have been seen in Dundee, Kilmarnock, Aberdeen, and other parts of Scotland.

The concentration of individuals in barracks, schools, and prisons seems to be a special factor in the spread of this fever, and doubtless accounts for its having been so often confused with typhus. Many of the epidemics on the Continent show us how liable recruits and young soldiers are to the disease. In ordinary civil life it is children and young adults up to the age of thirty who are most susceptible; babies in arms do not often suffer, nor do people over fifty years of age. Koplik, of New York, has, however, reported eight fatal cases less than one year of age. Infants of five months have been known to recover. Speaking generally, the older the child, the better are its chances of recovery.

People have often argued that this disease is not contagious, because they have not met with more than one or two cases in a house, for in a crowded city the distribution of the patients is very scattered; and, besides, in a well-ventilated hospital neither nurses, doctors, nor adjoining patients contract the fever from cases under treatment. The arguments in favour of the disease being considered highly infectious are, that in crowded houses you will often find several cases in one family; and there have been instances—perhaps due to faulty ventilation—of both nurses and patients developing the disease from cases in the hospital wards. Perhaps we may compare it to certain outbreaks of pneumonia, which at times in a family or school present a high degree of malignant infection. When I reached Boston, in the United States, in the spring of 1905 I found that the cerebro-spinal patients were carefully isolated in special wards, and their attendants were not allowed to mix with the rest of the hospital staff. The nurses all wore a white overall and covered up their nose and mouth with several folds of gauze bandage. On the other hand, when I went on to New York, and found the hospitals there crowded with similar patients, no great precautions were taken in addition to treating the patients in special wards, because the medical officers had never seen the disease directly communicated to anyone else.

In order to prevent the spread of the disease, it is a good thing to examine bacteriologically the nose and throat of hospital attendants caring for infected patients. The diplococcus is often found in them, and in such cases the nose and throat should be carefully disinfected. But it is not universally allowed that the avenue of infection is through the nose, for in 1905 Flexner, in New York, found that monkeys could be infected without great difficulty with *diplococcus intracellularis* and made to reproduce the pathological conditions present in man in cerebro-spinal fever. His experiments proved that the cocci, when introduced into the spinal canal by lumbar puncture, distributed themselves in a few hours through the meninges and excited an inflammation, the exudate of which accumulated chiefly in the spinal membranes and those at the base of the brain. The uniformity with which the chief exudate was found at the base of the brain, and the rarity of its appearance in large amount over the convexity, led him to doubt whether it was right to attribute this same localisation in man to the entrance into the meninges of the infective agent directly through the nasal mucous membrane. The inflammation of the meninges extends in monkeys into the membranes covering the olfactory lobes, and, Flexner says, into the ethmoid cells and into the nose. In some cases he found the nasal mucous membrane inflamed with small hemorrhages.

Dr. Hare, of Philadelphia, has reported a striking case, quoted by Professor Osler, which should be brought to the attention of all non-contagionists. A patient came into the town from a region in which cerebro-spinal fever was prevalent, and died within 48 hours. His physician, a very strong, robust man, of about 26 years of age, was

a devoted friend of the patient, and sat up with him until he died. Within 24 hours of the death of his patient the doctor was attacked, and died 48 hours after the onset. Dr. Hare, who had seen the original patient, and had attended the medical man, a day or two later had a slight fever with headache and stiffness of the neck; but in his case the attack passed off with great rapidity. There can be no doubt on this occasion that the poison was communicated directly from the patient.

The duration of cerebro-spinal cases varies extremely, from nine hours to several months. The average course of all cases is about 20 days, but the average of fatal cases is much less.

In New York alone, during the year I was there, no fewer than 2,755 cases of cerebro-spinal fever were reported, and probably many mild cases were not notified. Of the number reported, 1,511 died—a mortality of about 55 per cent. The diplococcus is found in the mucus of the nose in at least half the cases during their first week; it is, fortunately, of feeble vitality, being rapidly killed by drying and by exposure to sunlight, which makes the probability of infection by dust very unlikely. Cerebro-spinal fever in other animals has apparently no connection with the disease in man, always excepting the guinea-pigs and monkeys injected in laboratories. No one has yet thrown any light on the variation which causes some epidemics to affect infants, others older children, and others chiefly adults. The incubation period seems to be short, say from one to five days. Cerebro-spinal fever was originally regarded as an entirely epidemic disease, but of late years many have been converted to the view that the type of meningitis called posterior basic is really due to the same organism, the *Diplococcus intracellularis meningitidis*, and that, therefore, the cases of posterior basic meningitis, so well known in the children's hospitals of this country, are really only sporadic forms of the disease we are considering to-day.

One of the chief differences between cerebro-spinal fever and the forms of meningitis due to tubercular disease and the pneumococcus is that in the former the spinal cord is much more involved than in the latter, where the membranes of the brain are chiefly attacked. The clinical consequence of this is that in cerebro-spinal fever we get special symptoms which are rare in the other forms of meningitis—*e.g.*, stiffness of the neck, rigidity of muscles, sensitiveness of the skin, great retraction of the head, and sometimes opisthotonos. In cerebro-spinal fever the number of recoveries varies from 20 to 50 per cent., whereas in meningitis due to the tubercle bacillus, the streptococcus, or the staphylococcus, recovery is so rare that we hardly ever meet with it.

SOME POINTS IN THE SYMPTOMATOLOGY.

I do not propose to trouble you with a detailed description of the many symptoms of this disease, because you are familiar with them as described in such text-books as that of Professor Osler, who has, in addition, written an important monograph upon the subject for his Cavendish Lecture at the West London Medico-Chirurgical Society. But there

are a few points I should like to refer to briefly. One distinct characteristic of the fever is the abrupt onset, even in cases which do not belong to the fulminating type, whereas you know perfectly well that in tubercular meningitis the onset is slow and insidious. Some slight or marked rigidity in the neck is present at one time or another in all cases of cerebro-spinal meningitis, and opisthotonos is present in about 70 per cent. of the children affected.

In the majority of cases the skin and tendon reflexes are present in the early stages, but are apt to disappear before death in the rapidly fatal cases. The Babinski reflex is of little value in children below two years of age, who constantly have it in normal health or when suffering from other diseases; but the presence of this reflex is much more likely to occur in older children when they are suffering from tuberculous meningitis, as opposed to the cerebro-spinal form. You will remember that Babinski described extension of the great toe on irritation of the plantar surface of the foot as a characteristic sign of disease of the pyramidal tracts or of the lateral columns of the cord.

The contraction of the flexor muscles of the lower extremities, which we call Kernig's sign, is again of very little utility in children under two years of age, because the irritability is so great that it may be impossible to come to any conclusion as to its presence or absence; but it is more likely to be present in cerebro-spinal than in tuberculous meningitis. It was found in 115 cases of the former, out of 132. Hyperæsthesia and mental irritability are well marked in cerebro-spinal fever, whereas the child in tuberculous meningitis lies in a stuporous condition, hardly noticing its surroundings. Facial paralysis is a constant feature of the tuberculous form, but only occurs in the severest types of cerebro-spinal meningitis. The fever is so irregular that there cannot be said to be any characteristic curve.

Sometimes no eruption can be discovered, but often there is herpes on the lips, or brownish stains, or a petechial rash, which looks as if a penful of ink had been spluttered over the skin. On examining the blood, you will usually find leucocytosis present, sometimes as high as 40,000 per c.m.

The absolute diagnosis is, of course, formed by the detection of the diplococcus in the serum of the spinal canal; it must not be forgotten that the diplococcus may not be found by lumbar puncture after the first ten days of the illness. Also that the cerebro-spinal fluid will not remain sterile, and becomes full of bacteria in a few hours: hence it must always be used fresh. The normal amount varies greatly, often from 5 to 20 c.c.; the fluid is relatively most abundant in the first years of life. In cerebro-spinal meningitis there may be as much as 100 c.c., and the colour, instead of being absolutely limpid, or with a slight yellowish tinge, due to the pigment of blood serum, is whitish in this disease, looking like water which has been poured into a milk-stained glass. The alkaline reaction and the specific gravity (1,006 to 1,010) remain unchanged. In normal fluid there is found a body which reduces copper but not

bismuth, does not ferment, and is optically inactive; this body is absent in the fluid of cerebro-spinal fever. The total solids found in normal fluid are less than 1 per 1,000, but are considerably increased in meningitis, especially if purulent.

The symptoms of a typical and severe form of cerebro-spinal fever are unlikely to escape recognition by medical men if they have some knowledge of the usual symptoms, such as a sudden onset of shivering, intense headache, giddiness, and persistent vomiting, with an early profound disturbance of the nervous system, betokened by delirium, alternating with somnolence or stupor. A painful spasmodic condition of certain muscles, especially the posterior muscles of the neck, causes retraction of the head; and increased hyperæsthesia of the surface of the body, and sometimes petechiæ or mottling of the skin, are commonly noticed.

But when the fever appears in milder or anomalous forms, identification is naturally more difficult, and in this country mistakes have occasionally been made. Some seventeen years ago there were some localised outbreaks in the Eastern counties, which were generally mistaken for sunstroke or for typhoid fever, while in Northamptonshire similar cases were called pneumonia or sore throat; and as late as two years ago there were patients at Irthlingborough, near Northampton, who were thought to be suffering from influenza. Here is another instance of faulty diagnosis: During a small outbreak of the fever in Cairo, a Greek boy, aged six, was admitted to the German hospital, because it was thought by several medical men that his symptoms were due to cerebro-spinal meningitis. Arrangements were accordingly made to confirm the diagnosis by lumbar puncture, but before the operation could be done the nurse reported that the boy had passed an *Ascaris lumbricoides*. When *santonin* was administered, 39 similar worms were expelled, and his nervous symptoms immediately disappeared!

AIDS TO DIAGNOSIS.

I have so often referred to the confusion of one disease with typhus that I must not omit all mention of it while considering differential diagnosis, especially as typhus has become so rare a disease in England that the rising generation seldom sees it. Typhus is not characterised by the severe pains in the head and back of the neck common in cerebro-spinal fever, the eruption is general, and I have never known herpes to appear. The duration of the two diseases is different, for typhus lasts for two weeks, while this fever is either shorter or longer.

LUMBAR PUNCTURE.

Lumbar puncture is best performed when the patient is lying on his right side, with knees drawn up and the left shoulder turned forward. The needle of an antitoxin syringe is introduced midway between the third and fourth, or the fourth and fifth, lumbar vertebrae, below the spinous process, a little to one side of the median line, the thumb of the left hand of the operator being placed between the spinous processes as a guide. The needle should be directed slightly upwards and inwards, and should enter the canal at the depth of three-quarters

of an inch in infants, and from one inch and a half to two inches and a half in adults. The syringe should then be unscrewed, and the fluid allowed to fall drop by drop into a sterilised test-tube, until from one to three drachms have been withdrawn for bacteriological examination. If the puncture is being used with the idea of palliation or cure, of course a greater quantity may be removed.

The most common complication of the disease seems to be otitis in children; adults more often have joint complications. Pleurisy, pericarditis, parotitis, persistent headache, and optic neuritis have all been seen as sequelæ.

TREATMENT.

Hot baths for rigors, sponging for fever, and ice to the head or spine have been employed in many epidemics. Various drugs have been given, without any convincing results. In New York I saw cases treated with ergot, with the idea of trying to contract the blood-vessels; children had half a drachm of the fluid extract per rectum twice a day, and adults were given one drachm every three hours. I also saw several dozen patients treated with large doses, up to 30,000 or 40,000 units of diphtheria antitoxin, usually administered intra-muscularly, but sometimes intraspinally. This empiric treatment was fashionable for a few months on apparently no better grounds than that the diplococcus was found not to grow in the antitoxin. When I asked one of the best-known and best-respected physicians in New York what his then treatment was, he said: "I am now trying acetate of copper by the mouth, for in this disease one clutches at every straw, even if it be not a straw."

In many cases repeated lumbar punctures have helped the fever, headache, delirium, and general irritability of the patient, and there is no rule as to the number of times a case may be punctured, though one generally waits for four or five days before a repetition. When the fluid flows very rapidly from the cannula, as much as three ounces may be removed; but if the fluid flows slowly, drop by drop, one ounce will usually be sufficient to relieve all tension. Sometimes puncture has been followed by hæmorrhage, probably from the veins in the subdural space, but no ill effects have been known to follow.

THE SERUM TREATMENT.

Flexner has made a serum from artificially infected monkeys, which may some day prove to be of prophylactic value. Some cases have lately been treated by vaccine prepared from their own serum. Perhaps the worst form of treatment is that adopted in some parts of the Soudan, where the popular belief is that when a patient is unconscious or delirious he has devils in the head, and the only way to drive out these devils is by collecting as many of the women of the village as possible to congregate around the sick man. Then these women, with the help of the tom-tom and the weirdest shrieking, successfully drown his delirium; but one shudders to think of the effect of the treatment on the intense headache of the unfortunate patient.

SPECIAL ARTICLE.

MUSHROOM POISONING.

MUSHROOM poisoning is not absolutely common in this country, but cases occur every year, especially in rural districts, and occasionally the trouble is epidemic. The same applies to France and other European countries, and to America. The poisonous fungi and their effects are very similar in different places, and they have recently been described afresh from a clinical point of view by William W. Ford, M.D., D.P.H., Associate Professor of Bacteriology and Lecturer on Hygiene in Johns Hopkins University. The commonest fungi to cause toxic symptoms are *Amanita phalloides*, *Amanita muscaria*, *Amanita pantherina*, *Morbella esculenta* or Morells, and there are a few that are less common. It is obvious that the fungi that will most frequently be eaten are those which are least unlike ordinary mushrooms; poisoning by the bright scarlet poisonous fungi, for example, is very rare.

POISONING BY AMANITA PHALLOIDES.

Amanita phalloides, known commonly as "white" or "deadly Amanita," with the closely allied species *Amanita verna*, is the cause of by far the majority of fatalities from mushroom eating. It is known by a dozen various Latin names; in France it is called "l'orange ciguë," "l'orange blanche ou citronnée," "l'orange ciguë jaunâtre," and "l'orange souris." The Germans call it popularly "Knollblätterschwamm." The species indicated by these various names has a characteristic appearance, and is readily recognised by ordinary collectors of fungi. It usually grows to a height of five to seven inches, and it consists of a base or expanded cup (the poison cup), upon, or more properly speaking, within which rests the stalk. The latter is surrounded by an expanded top or pileus to whose under surface are attached the gills covered with white spores. The plant is pure white in colour, with the exception of the pileus, the upper surface of which varies from a china-white to an amber or pale yellow. Occasionally the top is greenish. The cup, the stalk, the under surface of the pileus, and the gills are always pure white, with the possible exception of a few flakes of yellow rarely seen on the stem. The pileus is usually smooth, but at times delicate flakes or scales easily removed by brushing lightly with the fingers, are found on the upper surface. The *Amanita verna*, regarded by many mycologists as merely the spring form of *Amanita phalloides*, differs from the latter only in size and colour. This form is always pure white, has few or no scales on the pileus, and grows to a height of but four to five inches. Much smaller forms are very abundant in the early spring, possibly the most common variety being a plant only about $2\frac{1}{2}$ to 3 inches tall, with a pileus measuring 1 to $1\frac{1}{2}$ inches in diameter. In all these species the colour of the spores may easily be ascertained by allowing the pileus to rest gills downward upon a sheet of paper. After the lapse of three or four

hours the spores are deposited upon the paper in a design representing the arrangement of the gills, and with a colour characteristic for each species. Neither *Amanita verna* nor *Amanita phalloides* is difficult to recognise, and both forms are abundant.

THE SYMPTOMS.

The clinical symptoms of this form of intoxication are characteristic. After an incubation period of six to fifteen hours there is a sudden attack of extreme abdominal pain, accompanied by vomiting and diarrhoea. Vomitus and stools consist of undigested food with much blood and mucus. Anuria is usually present, and rarely constipation is seen. Hæmoglobinuria has never been described, and in many cases specific statements are made as to the lack of colouring matter in the urine. Paroxysms of pain and vomiting alternate with periods of remission, the extreme suffering producing a Hippocratic facies, characterised by the French as "la face vultueuse." The loss of strength is rapid and excessive. Jaundice, cyanosis, coldness of the skin, especially of the extremities, develop within two or three days, followed by profound coma and death. Ocular symptoms and convulsions are rarely noted, but both may occur, the convulsions appearing as a terminal event more commonly in children than in adults.

THE COURSE AND PROGNOSIS.

The disease lasts four to ten days. If large quantities of the fungus have been eaten a very profound intoxication develops, and death may occur within forty-eight hours. The mortality in this form of intoxication is very high, varying from 60 to 100 per cent. in different epidemics, and death may follow the consumption of surprisingly small quantities. Plowright, for instance, has reported the death of a child of ten years from eating one-third of the top of a small plant, and there are numerous deaths reported from eating one or two good-sized specimens.

Cooking these fungi does not destroy their toxicity, the majority of accidents occurring with well-cooked material. The strength of the poisonous principles is apparently lessened, however, since smaller quantities of the raw plant can produce a fatal result than when the plants have been thoroughly heated.

The cases reported by Pfromm are so typical of nearly all the epidemics that they may well be quoted as representing the usual course of events. A family of Italians collected one Sunday a large quantity of "mushrooms," which they cooked and ate about six o'clock in the evening. The parents ate largely of the fungi, the two children merely dipping bread in the juice and eating the well-soaked bits. About midnight all members of the family were awakened by the most violent abdominal pain, accompanied by vomiting, headache, and extreme thirst. They were visited the following morning by a physician. He found them all

seriously ill, the father profoundly prostrated, cyanotic, with muscular twitchings about the chest. The patient soon became delirious, with glazed eyes and contracted pupils. His symptoms were somewhat ameliorated during the day, but towards evening they returned with equal severity. For a period of eight days periodical attacks occurred finally resulting in coma and death. During the latter part of the illness the characteristic Hippocratic facies was present to an extreme degree. The mother suffered from corresponding symptoms, especially from the vomiting and thirst. She finally developed delirium and coma, and died on the eighth day. During her attack she aborted of a five months fetus. Several similar cases are on record. The two children went into coma after a period of excessive pain and vomiting, dying 57 and 58 hours respectively after consuming the juice of the fungi. Specimens of the plants eaten were identified by botanists as *Amanita phalloides*.

THE ACTIVE PRINCIPLE IN THE FUNGUS.

The active principle of *Amanita phalloides* has been sought from early times, but our first knowledge of it is due to Kobert, who, in 1891, described a hæmolytic poison in this fungus, considered it a "tox-albumin," and named it "*phallin*." This substance he believed to be the active principle. Kobert modified his views in 1900, when he described an additional poison of great strength, which he stated to be an alkaloid. Subsequently Ford confirmed these early observations as to the hæmolytic substances in *Amanita phalloides*, but on the basis of biological experiments was led to believe that an active toxine existed in the fungus, and to this body he gave the name *Amanita-toxin*. Recently Abel and Ford have pointed out that the hæmolytic principle is not a proteid (tox-albumin), but an easily decomposed glucoside. This glucoside, because of its extreme sensitiveness to heat, to small traces of acid, and to digestion by pepsin and pancreatin, can play no rôle in the intoxication in man where the cooked fungi are introduced into the stomach.

TREATMENT.

No definite line of treatment can be recommended in *Amanita phalloides* intoxication beyond that adopted for poisoning in general. The thorough emptying of the stomach and intestines is usually brought about in the natural development of the intoxication, and should be encouraged rather than checked. Large quantities of morphia or some other anodyne are indicated to relieve the suffering and pain. The excessive thirst should be checked by the administration of any liquids which can be borne by the irritated stomach, and infusions of normal saline may be given subcutaneously. No drug has any antidotal effect upon the *Amanita-toxin*, and the only hope of successful treatment lies in the attempt to develop curative antitoxic sera, a procedure which Ford has shown to be theoretically possible.

POISONING BY AMANITA MUSCARIA.

The *Amanita muscaria*, known as the "fly-agaric" from the use of its decoction as a fly poison, is a beautiful mushroom, probably more generally

recognised as poisonous than is the "deadly amanita." Poisoning from its ingestion is by no means uncommon, but the taste is so bitter that little of the fungus is as a rule swallowed, so that the mortality is low, many of the affected individuals recovering without untoward symptoms. The fungus when full grown is 6 to 8 inches high, with a widely expanded pileus. There is no distinct poison cup, the stem terminating in an expanded bulbous extremity. The stalk is covered with fairly adherent scales, which also lie thickly studded on the upper surface of the pileus. The stalk, the under-surface of the pileus, the gills, and spores are white. The top of the pileus is a beautiful yellowish or reddish-brown colour, varying in different countries.

THE SYMPTOMS.

The symptoms of poisoning by *Amanita muscaria* are quite distinctive. They appear soon after the ingestion of the fungus, frequently within an hour or two. They consist of vomiting, diarrhœa, severe headache, with ocular symptoms, such as diplopia and contraction of the pupils, followed by delirium, a rapid loss of consciousness terminating in convulsions of the most violent character.

Death may result from the intoxication, but in the majority of cases only small bits of the fungus are swallowed, the rest being spat out on account of its bitterness, so that the effect of the poison gradually wears off. The delirium may be very marked and it is followed occasionally by amnesia.

In the cases which recover the serious symptoms ameliorate rapidly, and the period of convalescence, once established, is usually short—two or three days. Sometimes fungi either closely related to *Amanita muscaria*, or identical with it, lack the bitter principle of the true "*muscaria*," and are eaten in large quantity with rapidly fatal outcome.

THE ACTIVE PRINCIPLE OF AMANITA MUSCARIA.

The active principle of *Amanita muscaria* is *muscarine*, a chemical substance related to neurine and choline, with the formula $C_8H_{11}NO_2$. It has been prepared synthetically by the oxidation of choline.

TREATMENT.

As a logical consequence of our knowledge of the properties of muscarine, atropine was suggested as the physiological antidote, and it has been used with a considerable amount of success.

POISONING BY MORELLS, OR HELVELLAS.

According to Kobert there are no authentic cases of poisoning from the true Morella, of which he recognises five different species. There are, however, over 160 cases recorded of poisoning from the false Morells, properly called Lorchbells, of which the most important species is *Helvella*, or *Gyromytra esculenta*. Its active principle has been isolated and called helvellic acid. It is completely soluble in hot water, the aqueous extract killing dogs when given by the stomach. The symptoms of intoxication in these animals are the same as when the fresh fungus is eaten, and in both intoxications there is marked hæmoglobinuria, pointing to

a hæmolytic poison. The toxicity of *Helvella esculenta* disappears, or is much lessened, when the fungi are dried.

POISONING FROM OTHER VARIETIES OF FUNGI.

In addition to the species already described, the lethal effects of which are well established, a number of other fungi are credited with poisonous properties, and rarely death has been ascribed to their ingestion.

No cases of poisoning from the use of any of the purple-spored or black-spored agarics are on record. These plants, like many other foods when slightly decomposed, may give rise to severe intestinal disturbances, with marked prostration. The cases of poisoning reported from the field or meadow mushroom are not authentic. In the majority of instances the fungi said to be *Agaricus campestris* have not been identified as such by competent authorities, and where description of the plants has been given it is apparent that either

Amanita phalloides or *Amanita muscaria* was eaten by mistake for the ordinary mushrooms.

Collectors of mushrooms for eating purposes should limit themselves to the use of well-known species, such as the purple-spored and black-spored agarics, the edible species of boletus, and certain varieties of lactarius and polyporus. White-spored agarics should always be avoided, even if the edible *Amanita cæsarica* or *aurantiaca* is thus lost to the pleasure-loving palate. Especially should the *Lepiota* and the *Amanitopsis*, species closely allied to *Amanita phalloides*, be strictly eschewed; while the typical plants, perhaps, are not difficult to identify, specimens of *Amanita phalloides*, in which the veil has dropped off, closely resemble the *Amanitopsis*, and those in which the poison cup is sunk deep in the ground may readily be mistaken for *Lepiotes*. For an excellent list of edible and poisonous mushrooms those interested should consult the last edition of Kobert's "Lehrbuch der Intoxikationen."

PRACTICAL NOTES ON DIAGNOSIS AND TREATMENT.

Dry Eczema with Pruritus.

IN this condition such an ointment as the following is useful: Menthol, gr. xxx.; resorcin, gr. xv.; precipitated sulphur, 3ij.; zinc oxide, 3iij.; vaseline, 3j.

Tobacco Amblyopia.

PATIENTS suffering from tobacco poisoning often notice that they have difficulty in distinguishing between gold and silver coins. Another common statement is that they see better in the dusk of the evening than in the bright light or sunshine.

Cramps in Diabetes.

CRAMPS in the lower limbs are common in cases of diabetes. They are rare in the daytime, but may be very troublesome at night. They occur principally in the calves, but also affect other leg muscles. *Dr. Benjamin Ward Richardson.*

Vaginal Discharges.

WHEN the acute inflammatory condition of the vaginal mucous membrane has subsided, or where it does not exist, and when the exudation has become well established, the local application of ichthyol in the form of a 10 per cent. ointment may prove remarkably effectual.—*Dr. More-Madden.*

Psoriasis.

WHEN this affects a considerable area the patient may be given a sulphur bath for three-quarters of an hour, during which the patches should be vigorously rubbed with soap. Then apply to the affected areas a mixture containing oil of cade 2 drachms, collodion 5 drachms.

Laryngeal Irritation.

THE following formula, taken from the Brompton Pharmacopœia, is often useful in allaying laryngeal irritation: Glycerine of carbolic acid 3j., chloroform ℥ x., added to a pint of boiling water and the steam inhaled. In some cases relief is obtained by sucking ice.

Chloasma of Pregnancy.

DR. HARE recommends the following: Zinci oxid., grs. vj.; hydrarg. ammon., grs. ij.; ol. theobrom, 3v.; ol. ricini, 3v.; ol. rosæ, ℥ x. Apply to the face night and morning.

Optic Neuritis in Chlorosis.

THE most intense optic neuritis, precisely like that of cerebral tumour, may be due to anæmia, at any rate to the chlorotic anæmia of girls.—*Sir William Gowers.*

Impacted Cerumen.

WHEN the cerumen is hard, dry, and adherent, use a solution of sodium carbonate (10 grains) in 2 drachms each of glycerine and water. Introduce a few drops into the ear several times a day, and then in the course of a few days the wax will be softened and can be removed by injections of warm water. Afterwards put a plug of cotton-wool in the meatus and leave it for 24 hours.

Phthisis Pulmonalis.

WHEN with active mischief in one lung the other lung becomes infected, the first signs of this accident will not be found in the extreme apex of the secondarily affected lung, but in other situations—namely, in the case of the right lung by examining over the second right costal cartilage near the sternum, and in the case of the left in the anterior axillary line just above the level of the nipple.—*Dr. J. Edward Squire.*

Parametritis and Albuminuria.

MATTHEWS DUNCAN showed that in parametritis albuminuria often occurred. This is sometimes due to bursting of an abscess into the bladder or to the coincident existence of cystitis or of Bright's disease. But apart from these cases there are others in which there is, during parametritis, a considerable amount of albumen in the urine—half its bulk or more without either casts or pus. As the parametritis gets well, so does the albuminuria.—*Dr. Herman.*

OTOLOGY.

FURUNCULOSIS OF THE EXTERNAL AUDITORY MEATUS.

SOMETIMES the pain of a boil in the ear is comparatively slight, amounting merely to a little local tenderness. Very often it is severe enough to disturb sleep, and occasionally it is so acute that even a robust man soon becomes thoroughly ill.

PATHOLOGY.

The essential cause is the staphylococcus pyogenes aureus, or albus in the hair follicles of the meatus. Follicular inflammation often begins without any obvious cause, in apparently healthy persons. Sometimes it is part of a general furuncular state, and sometimes may be observed in typhoid fever, diabetes, and other debilitating diseases. Local irritation is not infrequent; indeed a boil often complicates chronic otorrhœa, due to otitis media. Sometimes the cause is found in injuries to the ear inflicted by patients themselves when troubled with eczema or subjective pruritus. Probably men are more often affected than women. The condition is not common in children.

The process originates in the outer half of the meatus. A group of glands is inflamed, and forms a tender swelling. The focus enlarges and the central area sloughs; the slough is surrounded by pus, which in time points, and, if permitted, eventually bursts on the surface. As the slough disintegrates and is discharged with the pus the inflammation gradually subsides, and, in process of time, all swelling disappears.

SYMPTOMS.

The symptoms vary somewhat, according as the boil begins superficially or deeply. In the latter case the first symptom is increasing throbbing pain radiating to the head or neck. The pinna becomes tender when touched, and the pain may be almost maddening if the meatus is moved. With movements of the jaw the pain increases so that the patient may be almost afraid to eat. Sleep is interfered with, and the patient soon comes to wear an expression indicative of pain and fatigue. To examine the ear a good light should be obtained, and reflected into the meatus. At first very little may be seen to account for the great pain, especially when the inflammation is deep seated in origin. Sooner or later the side of the meatus affected becomes flatter, and the canal narrower. In time the swelling increases until an elevation projects into the meatus, and the lumen is almost or quite closed. Provided there be no meatal débris, it may be easy to view the membrane and parts of the canal deep to the swelling, in the early stages. This examination should be made for the purpose of excluding swellings of the meatus due to mastoiditis.

The most frequent situation for a boil is the posterior or inferior wall or the inner surface of the

tragus. Although the lymphatic glands of the neck are seldom involved, those over the parotid are frequently enlarged and tender, and it is not very uncommon to find the glands on the mastoid process affected too. It is most important to recognise that the post-auricular furrow is often swollen and oedematous, especially in boils on the posterior meatal wall. This must not be mistaken for superficial mastoiditis, a distinction not always easily made. Furuncles often recur in the meatus one after the other. Though generally single, several at a time are occasionally met with.

TREATMENT.

The first indication is the relief of pain. This is often very severe in character and robs the patient of rest. Opiates and other soporifics are, however, to be avoided if possible. Free incision into the most tender area will give certain and speedy relief. The most tender spot must be determined by carefully touching with a probe. Even when there is obvious swelling the rule should be to incise through the point of maximum tenderness. The incision must be made sufficiently deep, and must be made right down into the inflamed area. Local anæsthetics in the case of deep-seated furuncles are generally disappointing. Nitrous oxide gas should be given in these cases. In addition to local treatment, it is always helpful to administer an efficient purgative at the outset, preferably a mercurial one followed at an interval of four to six hours by a saline draught. This, in addition to its immediate effect on the inflammatory processes, is valuable in preventing recurrence of the trouble.

When the furuncle is of the superficial variety, and the pain less severe, we may use a local application. One of the most satisfactory and certain in action is glycerine of carbolic acid (acidum carbolicum liquefactum added to glycerine, 1:4) applied on a pledget of wool until the pain is relieved. The pledget should then be removed and a hot fomentation placed over the side of the head. In the later stages, when the furuncular abscess is about to burst, the incision should be made by transfixion with a strong, sharp-pointed knife. Even when the abscess has burst an incision will be indicated to hasten the cure, by giving free exit to the slough. If this is slow to separate, and there is a tendency to sprouting granulations with persistent infiltration lasting some weeks, the curette can be made very effective use of.

In mild cases boric acid in alcohol, 1:20, used in the form of drops two or three times a day, will often cause a small boil to disappear in a few days.

OPSONINS AND VACCINES.

If in spite of attention to the general health, change of air, and so forth furuncles still recur, one must consider the anti-staphylococcic vaccine treatment. We have known more than one case in which this alone led to a permanent cure.

CLINICAL POINTS.

ATHLETICS AND ALBUMINURIA.

THE question of the significance of the albuminuria which is so often found in young males over puberty, and which is called by various names such as "functional," "physiological," "postural," "cyclic," and so on, is one upon which views have greatly changed during the last ten years. There are two large classes who still suffer from the effects of older views, namely, young men who wish to insure their lives, and young men who are desirous of taking posts in one or other of the public services, in banks, and similar places.

The older view was that this albuminuria of adolescent manhood was a sign of evil omen, and that it indicated an instability of the kidneys, which, if not actually the seat of Bright's disease, were at least prone to it. There are, of course, cases of actual Bright's disease in young men; there are cases of albuminuria from heart disease, from blood diseases, and so forth; it is not to these that the term functional albuminuria applies, but to those youths and young men who may never have had a day's illness since they were children, who feel and look well, and who come up for medical examination in the full expectation of being passed. We mean, moreover, those in whose urine the presence of albumen in the urine is not constant, large amounts being found at one time and none at all at another, while microscopical examination of the deposit discovers no pathological number of renal tube casts. We say "pathological number," because urines which are centrifugalised to the extent they are nowadays in clinical laboratories will very often be found to yield a cast or two, even when there is no albumen in the urine, and there is every reason to suppose that the individual who passed the urine is absolutely sound and well.

Every doctor who has had any number of boys at school to examine, or who has examined candidates for life insurance, or for bank-clerkships and the like, has come across the difficulty of knowing what to advise when a hopeful candidate is found to have this albuminuria. In the olden days the candidate would have been rejected forthwith as an unsafe life; at present it is the common rule at insurance offices to postpone the proposal on the life for some months, during which time several separate examinations of the urine are made at intervals; if albuminuria is found every time, the proposal is declined; if albumen is present at some examinations and not at others, the risk upon the life may be accepted with a load of from five to seven or ten years.

We feel sure, however, that this constitutes a hardship upon those insured; for, as we shall see presently, the prognosis in these "functional" cases is as good as it is in a person of the same age without albumen in his urine. We think it quite essential that the insurance offices should safeguard themselves against accepting cases of actual nephritis, by postponing the acceptance of the pro-

posal until further examinations of the urine have shown that it is sometimes quite free from albumen; candidates would be well advised to have an early morning specimen examined if they wish to get one free from albumen, because the more walking about and exercise there has been before the urine was passed, the greater is the likelihood of its containing albumen. We even think that, granted that the urine is sometimes free from albumen, the companies should still insist upon having a microscopical examination of the centrifugalised deposit carried out by a skilled person, to be sure that no pus cells, blood corpuscles, nor renal tube casts are present. When, however, both the absence of albumen upon occasions and the absence of pathological findings under the microscope have proved that the condition in any particular case is "functional," then we think that no load is necessary in accepting the life; we believe that the office which would accept these lives at tabular rates would find them good, and that the time is coming when these lives will not be loaded.

The evidence upon which this view is based is derived from numerous papers upon the subject; perhaps the most convincing of these is one by Dr. Collier, based upon examinations of the urines of undergraduates at Oxford, before and after rowing or other exercises. Dr. Collier found that, almost without exception, every rowing man had abundance of albumen in his urine after rowing a race, while the same man before the race, or a few hours afterwards, when he had changed his clothes and rested, had no albuminuria at all. Dr. Collier says: "I could produce several young men at Oxford who, if they wished to insure themselves or enter for the Indian Civil Service, would be accepted as first-class lives if they were examined in the morning, and would fail in the afternoon, because after a certain amount of exercise their urine would show a definite amount of albumen." Dr. Dunhill previously published statistics precisely similar to those of Dr. Collier; in every single member of the crew at Melbourne University he found albumen in abundance after a race, though there was no albuminuria at other times in the same men. Urine was collected from eight competitors in a ten-mile cross country run immediately after they had finished; every one of the specimens contained albumen.

It is clear, therefore, that severe bodily exercise not only may cause albuminuria in young males, but practically always does so. This being so, it is not at all surprising that in many young males fairly ordinary exercise will cause it. Such "functional" albuminuria is normal in these cases, differing only in degree from the normal albuminuria which occurs in all young men after severe exercise.

It will naturally be asked: What is the ultimate result in these young men who have gone in for athletics so constantly that they must have again and again had albuminuria? The answer to this

has already been worked out; for it has long been known that the average length of life of the men who have gone in for rowing at the Universities is distinctly greater than is that of the rest of the average men of the same age. The risk in accepting these lives for insurance should, therefore, be a good one. Formerly, urines of athletes were not examined for albumen; in the happy ignorance of their albuminuria, the athletes and rowing men were not bothered with the question whether or not they should go on with their various forms of exercise notwithstanding albuminuria, and obviously it did them no harm. Since then many a man has been advised to discontinue his athletics because he has been found to have albuminuria after them; the doctrine that athletic albuminuria is a contraindication to vigorous exercise must now give way again, and athletes need pay little or no heed to their albuminuria. In Dr. Collier's words:—

"Ought one any longer to advise young men who pass large quantities of albumen after severe muscular exercise to give up all hard competitions? I think not. These investigations would seem to

prove that, if so, we must discourage severe athletic competitions altogether. Of this year's Oxford University crew every member after rowing a trial over the full course passed a definite amount of albumen, and at least half the crew passed a very considerable quantity. With the college crews the same thing happened. In the New College boat, head of the river in the Torpids, after rowing a course every member's urine contained some, while in five of the crew the amount was large. The running men seemed to pass even more than the rowing men. . . . Finally, ought the assurance companies to continue to refuse to consider the acceptance of the lives of young men between the ages of 18 and 30, whose urines are found to contain albumen after exercise when it can be shown that no albumen is present after rest or after a meal? I think not. I have known instances of men who have been absolutely refused because they happened to be examined in the afternoon after exercise, when they would certainly have been accepted had they been examined in the earlier part of the day. To me this seems a very unsatisfactory state of affairs."

POINTS IN THERAPEUTICS.

THE TOXIC EFFECTS OF VERONAL.

VERONAL has proved itself to be an excellent hypnotic for ordinary cases of insomnia, also for febrile conditions, and even under certain circumstances for sleeplessness due to pain. As a rule the sleep comes on in about a couple of hours, it is deep and refreshing, but it is perhaps of rather shorter duration than that which follows some other hypnotics. There are seldom any feelings of heavy drowsiness the next day, and upon the whole the drug is one of the most satisfactory of the milder hypnotics. It acts more readily in women than in men.

There are, however, certain untoward effects which have occasionally followed the use of veronal. The commonest of these is delirium; in a certain small proportion of patients veronal acts as a deliriant rather than a hypnotic. It would seem, therefore, that veronal should be avoided when, from the nature of the illness itself, there is any tendency towards delirium; and it is decidedly unwise either to give it in large doses at one time, or to repeat an average dose at a comparatively short interval, in any case in which the patient's idiosyncrasy as regards veronal is not already known from previous experience. It sometimes happens that the desired sleep does not follow the first dose, and one is tempted to give a second a few hours after; it is better that the second dose should be something else than veronal unless one is quite sure that the particular patient takes veronal well. The usual dose is 7 grains, and it is inadvisable to exceed this. In the great majority of suitable cases where a simple hypnotic is required, refreshing sleep will follow, but it is well to know that there are a few cases—apparently suitable so far as one can tell be-

forehand—in whom the effect may be delirium instead of sleep.

There are already a few cases of suicidal poisoning by veronal on record, the doses which have proved fatal being a little over 1 drachm. The main symptom which results is coma, deepening to death. A few persons who have swallowed a lethal dose have been fortunate enough to vomit soon afterwards, in consequence of which they have evacuated a sufficient quantity of the poison to recover; the majority do not vomit, and recovery is impossible unless their stomachs are washed out quickly. The coma may persist for three days before death ensues, and meanwhile the face becomes very cyanosed, the respiration rate is slightly increased, and the pulse, well sustained for a time, becomes gradually more feeble and ultimately intermittent. The reflexes are not lost in the earlier stages of the coma, the pupils being of moderate size and reacting sluggishly to light, but later the reflexes get less and less, and are finally abolished altogether. One patient, a man aged 54, whose case is recorded by Zörnlaub, lived for twenty-four hours after taking 2½ drachms of veronal; another, a woman aged 26, died on the third day after taking 1½ drachms.

We have laid considerable stress upon the dangers of veronal; but we would at the same time repeat that in suitable cases and in suitable doses it is a pleasant and fairly certain hypnotic. It is on this very account that it is liable to become misused; it should never be taken except when specially advised, and patients should not be allowed to get into the way of taking a dose of it whenever they feel inclined. It is at present too easy to purchase successive doses of these hypnotics, until a fatal dose has been accumulated without any suspicions being aroused.

DERMATOLOGY.

THE TREATMENT OF FACIAL LUPUS VULGARIS.

By J. GOODWIN TOMKINSON, M.D., Assistant Medical Electrician, Glasgow Western Infirmary.

Of the many skin diseases more or less amenable to electrotherapeutics, cutaneous tuberculosis is prominent by reason of its frequency. A short account of the method which I employ in hospital practice for the treatment of facial Lupus vulgaris may be of interest to those possessing an *x*-ray apparatus.

While fully convinced of the high value of the treatment introduced by Finsen—especially after hearing the admirable paper read at the Paris Congress on tuberculosis in 1905 by my teacher and friend, De Beurman—I find that many cases yield with far greater rapidity to a combination of *x*-ray treatment with mildly caustic methods, and the results of this combined method have determined me to abandon, if not entirely, yet very largely, the light treatment of Lupus vulgaris. Many cases with which one is confronted in hospital practice are so extensive that their treatment by the Finsen method would be virtually interminable. And hence the points that the *x*-rays are more expeditious, are applicable to wider areas of disease, give a resulting cicatrix of high æsthetic value, and have a tendency to reduce any keloidal condition already existing—primary or the effect of previous treatment—indicate the exhibition of this remedy.

SURGICAL INTERFERENCE.

In facial lupus vulgaris permit me to dismiss the question of surgical intervention as altogether contraindicated, save in cases of extremely limited dimensions. At the same time it would be only just to recall the excellent results obtained, especially by exponents of the French School of Dermatology, by multiple scarification, particularly when combined with the application of 5 per cent. aqueous solution of permanganate of potash as recommended by Hallopeau, and practised by him at L'Hôpital Saint Louis, Paris. Occasionally the sharp spoon is of value, but in my own work at the Glasgow Western Infirmary, in so far as the treatment of facial lesions is concerned, I use no local adjunct to *x*-ray therapy more drastic than the caustic applications about to be described.

HOW TO START THE TREATMENT.

At the outset of the treatment of a case the crusts—if any exist—are first removed, and these are usually quickly detached by the application of a salicylic ointment. A tentative *x*-ray exposure of from three to five minutes is afterwards made, directed upon a small area of the lesion; after three or four days the exposure is repeated for five minutes daily, unless contraindicated, until the whole lesion has been treated some three or four times. The lesion is then covered with a strong salicylic acid plaster, and for this purpose Unna's 50 per cent. salicylic acid and creosote

pflastermulle is employed. The plaster is renewed daily, preceded if badly borne by the use of 10-20 per cent. aqueous solution of cocaine. When the tuberculous nodules are in the main removed the lesion is swabbed with cocaine solution, then dried, and painted with the following preparation:

| | | | | |
|----|-------------------|-----|-----|--------------|
| R. | Acid. carbolic | ... | ... | 50 per cent. |
| | Acid. lactic | ... | ... | 15 " |
| | Acid. salicylic | ... | ... | 15 " |
| | Alcohol. absolut. | ... | ... | 20 " |

(Well agitated before application, as there is a considerable sediment.) A few minutes afterwards the lesion is painted with the following solution:

| | | | | |
|----|-------------------|-----|-----|--------------|
| R. | Acid. carbolic | ... | ... | 80 per cent. |
| | Alcohol. absolut. | ... | ... | 20 " |

(Billet)

(This second formula is that employed in Billet's phenol treatment.)

The lesion is then dressed with sterilised lint and carbolic oil (1-30) for a day or two, and thereafter with 20 per cent. aqueous ichthyol solution, until healing—often relatively rapid—has taken place: in some instances the application of the ichthyol solution is omitted until the lesion has been replastered and re-cauterised perhaps three or four times. After healing by the use of sterilised lint and 20 per cent. aqueous ichthyol solution—which may be accelerated by first bathing the part with a little of the solution to which 25-50 per cent. methylated spirit has been added (cocaine swabbing is indicated)—the treatment by *x*-rays is recommenced; five to ten minutes, usually the former, is the length of time of exposure. After this second period of *x*-ray exposures, the duration of which is determined by the individual case, the lesion is again "broken down" with the salicylic acid pflastermulle and cauterised with the "tri-acid" and carbolic solutions. After the surface has again been healed with ichthyol solution the affected area is submitted to a few *x*-ray exposures, and the patient is sent home if residing in the country, or, if living in town, to a convalescent home if possible. During the cessation of the more vigorous treatment the cicatrix in some instances is treated by mercurial inunction or the application of $\frac{1}{2}$ per cent. perchloride of mercury lotion. The duration of this course obviously varies with the extent of the lesion and the idiosyncrasy of the patient, but, in most cases, at the end of three or four months' treatment is discontinued for a long period, during which the patient returns occasionally for inspection, and continued improvement is often recorded. If necessary, as is usually the case, the treatment is repeated once or more.

Whenever constitutional treatment is indicated it should be instituted: the medicinal agents most frequently employed are syr. ferri iodidi, syr. Easton, ol. morrhue, and saline aperients; a generous dietary and residence amidst hygienic surroundings are also enjoined.

RESIDENT MEDICAL OFFICERS' DEPARTMENT.

[Contributions to this Column are invited, and, if accepted, will be paid for.]

NOTES ON NINE CASES OF FRACTURE AT THE UPPER END OF THE HUMERUS.

By GEO. S. PARKINSON, M.R.C.S., L.R.C.P., Assistant House Surgeon,
The Infirmary, Leicester.

IN the treatment of fractures complete immobilisation of the part for any length of time is now a thing of the past. Everyone is agreed that the best results are attained where early massage and movement have been adopted. This is more especially the case in fractures in the region of a joint, because, apart from the excessive formation of callus, fibrous adhesions may seriously impair function. In fractures involving the shoulder joint various forms of retentive apparatus have been used from time to time, the most common of which is, perhaps, the shoulder cap. This is the best apparatus when any is used, but it is not always necessary. With regard to other forms of splints, we are all aware that the prolonged use of splints may lead to a stiff joint, to say nothing of ischæmic contraction or pressure on nerves, leading to atrophy of muscles. With fractures of the upper end of the humerus, where the normal range of movement is great, any limitation is most detrimental.

The following notes have been taken on nine consecutive cases of fractured surgical neck of the humerus; in each a radiogram was taken to confirm the diagnosis. In no case was any splint or shoulder cap used, and in all the result was most favourable.

A list of the patients with their ages, occupations, and injuries is now appended.

| Sex | Age | Occupation | Injury |
|--------------|-----|-----------------|---|
| 1. Man ... | 39 | Mechanic ... | Fractured surgical neck |
| 2. Man ... | 32 | Mechanic ... | Fractured surgical neck |
| 3. Woman ... | 35 | House work | Impacted surgical neck with oblique fracture in upper 1/3 |
| 4. Boy ... | 11 | School ... | Separated epiphysis |
| 5. Woman ... | 65 | House work | Fractured surgical neck; had broken radius six years previously |
| 6. Man ... | 48 | Police Sergeant | Comminuted fracture of surgical neck |
| 7. Man ... | 54 | Traveller ... | Comminuted fracture of surgical neck |
| 8. Man ... | 39 | Shoe hand | Comminuted fracture of surgical neck |
| 9. Boy ... | 13 | — | Separated epiphysis |

TREATMENT.

On the day of injury, *lotio plumbi* \bar{c} *opio* is applied to the injured parts, and a pad of wool is placed in the axilla, held in position by a three-inch bandage applied in the form of a spica; another piece of wool is placed in the opposite axilla to prevent chafing. The arm is then supported in a sling; this does not include the elbow, which is left free for purpose of extension. The arm is not bandaged to the side. On the following day *lotio plumbi* \bar{c} *opio* is again used, and a fresh pad placed in the axilla as before. On the third day very gentle massage is begun, the muscles round the injured joint being lightly rubbed while the arm remains in the sling. The arm is then taken out of the sling, carefully supported, and rotated through no more than a quarter of a circle; then the shoulder spica, pad, and sling are re-applied.

This treatment is continued for three weeks, the pad in the axilla being omitted at the end of a week. The patient comes up three times each week. On each occasion the normal movements of the shoulder joint are practised, the range of movement being increased at each visit. At least once in every week faradic current should be given, the motor points of the muscles being picked out with the electrode. At the end of three weeks the whole arm, including the elbow, is carried in a sling, and active movement permitted. Heavy massage is now of benefit, that is, kneading of the muscles combined with firm rubbing. At the same time, exercises should be ordered such as:—

1. Raising both arms from the sides, with elbow successively flexed and extended.
2. Bringing the arms straight out in front, palms of the hands together, and sweeping them back in a line with the shoulders against resistance.
3. Placing the hands on the head, behind the back, and on the opposite shoulder, with rotation of the humerus in the glenoid cavity.

Patients are given the B.P. lin. pot. iod. \bar{c} *sapone* to rub the shoulder with at home, and encouraged to use the injured arm as much as possible. This treatment lasts six or seven weeks.

Of the nine cases treated in the manner described the first four on the list could raise the arm nearly vertically above the head, all the other movements at the shoulder joint being equally free. The two mechanics returned to their work at the end of ten weeks, and were able to follow their trade. The boy aged 11 with the separated epiphysis made such a good recovery that, when moving both arms at the same time, several people were unable to state which had been the injured limb. The woman, though the head of the bone appeared to be fractured in two places, also got a very useful arm. In the early days of her treatment the deltoid showed some signs of atrophy, and the response to faradic current was sluggish, but under constant massage the muscle soon regained its tone. Of the next four, the woman of 65 years of age suffered from rheumatism, and severe movement was not practised; she, however, could raise the arm nearly to a right-angle with the side, was able to feed herself, and had some rotation. The other three cases were all very bad fractures, the radiogram showing marked comminution. In every case the hand could be placed on the head, behind the back, on the opposite shoulder, and a certain amount of rotation was present. The ninth case is a boy with a separated epiphysis; he is still under treatment, and progresses favourably.

These nine cases illustrate the fact that, to get union in fractures, complete immobilisation is unnecessary, and in many regions, as about the shoulder, inadvisable.

PUBLIC HEALTH AND HYGIENE.

SANITARY ADMINISTRATION IN IRELAND.

SIR CHARLES A. CAMERON, Professor of Hygiene and Chemistry, R.C.S.I., and Chief Medical Officer of Health for Dublin, read a paper at the Conference of the Royal Sanitary Institute held in Dublin on June 25, in which he thus sums up sanitary administration as practised in the Sister Isle:—

"The Sanitary Acts are administered in Ireland by the following bodies. First, the Local Government Board, the supreme public health authority of the country; second, the county boroughs; third, the urban district councils; fourth, the rural district councils. The Local Government Board has certain powers vested in it by statute, which enable it to supervise the boards of guardians who have charge of the pauper poor, sick or well. The Board must approve of the appointment and dismissal of officers of the guardians; its auditor examines their accounts and makes surcharges if payments of money have been illegally made. It must approve of the appointment and dismissal of sanitary officers, and of their salaries and increases of salaries. This practically secures fixity of tenure to the medical officers of health, who are appointed by the sanitary authorities, in which respect they are in a more secure position than the medical officers of health in England and Wales.

"The borough councils are empowered to appoint medical superintendent officers of health, executive sanitary officers, and sanitary sub-officers (another name for inspector of nuisances or sanitary inspector). They can establish hospitals and work them, or contribute to their maintenance, or do both.

"The Irish Public Health Act of 1875 constituted all the Poor-law medical officers *ex-officio* medical officers of health. They were paid by the boards of guardians; but when their districts were situated in towns having sanitary authorities, their salaries were fixed, though not paid, by those authorities. This anomaly ceased on the passage of the Irish Local Government Act, which transferred the payment of the salaries of the medical officers of health from the boards of guardians to the governing bodies of the counties and boroughs, and of the newly created rural district councils.

"It is now generally conceded that it was a mistake to have converted *volens volens* the dispensary physicians into medical officers of health. So far as the large towns are concerned, the district

medical officers of health perform, on the whole, very good sanitary work. In the rural districts they are handicapped very largely. They have not efficient sanitary sub-officers. The rural district councillors are practically the boards of guardians, who elect and pay them as dispensary physicians or medical officers of the workhouses. The health officers, whenever they make sanitary reports, are not unlikely to give offence to some one or other of the rural district councillors. This is particularly the case as regards the hygiene of the dairy and farmyard. A considerable proportion of the milk supplied to the towns comes from the country. The sanitary sub-officer, who is generally also the relieving officer, and who has a salary of only a few pounds a year, can hardly be expected to give much attention to the hygiene of the dairy and cowsheds. He is not qualified by the possession of a certificate of competency to act as a health officer granted by such bodies as the Royal Sanitary Institute. I think it may safely be assumed that in the greater number of the rural districts in Ireland the sanitary laws are practically a dead letter.

"Whether or not the *ex-officio* medical officers of health should cease to exist, the county council ought to be empowered to appoint medical officers of health and sanitary sub-officers. If the officers' functions ceased, the sanitary staff of the county would have to be larger than if there were no district medical officers. In England and Scotland, as well as in Ireland, there are district medical officers of health; but that did not prevent the establishment of county officers, with powers to act in every district and to review the proceedings of the local authorities."

Sir Charles Cameron then suggested that the Conference of the Sanitary Institute should urge the appointment of county medical officers and a staff of fully qualified sanitary inspectors, and a motion to this effect was carried *nem. con.* Having regard to the peculiar character of the public health service, this would certainly seem to be the best solution of the problem of sanitary administration in Ireland. Were this done, there would then be no need to interfere with the existing *ex-officio* medical officers of health; but as vacancies occurred it might be enacted that their duties should, where it was desired, devolve upon the county medical officers.

THE ROLE OF SANATORIA AS A FACTOR IN CHECKING TUBERCULOSIS.

PROFESSOR E. J. McWEENEY, Bacteriologist to the Local Government Board for Ireland, in a paper read before the Conference of the Royal Sanitary Institute at Dublin thus sums up the part played by sanatoria in the treatment of tuberculosis:—

1. It is the only curative institution.
2. Without a place whither curable cases can be

sent, the work done against tuberculosis can be at best only advisory, and therefore ineffective.

3. It provides the best centre on which popular endeavour may be focussed, and from which hopeful and hygienic streams of influence can radiate on to the community at large.

4. It may be provided out of local taxation under the existing law.

Conditions essential for the success of the sanatorium are:—

1. The reception of early cases only. When tubercle bacilli have appeared in the sputum, the case has already passed out of its earliest stage and into that of lung destruction. Modern methods, such as *x*-rays, agglutination, and diagnostic injections with Koch's old tuberculin, should be resorted to in order to assure the diagnosis before the sputum becomes bacilliferous.

2. The conduct of the institution by a genuine expert—i.e., a medical man who has previously devoted all his attention for several years to sanatorium work. Much of his success will depend on his power of individualising his cases, and this cannot be done without special study.

3. The situation should be suitable and the construction specialised, with the view of (a) dust prevention and ready cleansing; (b) avoiding draughts whilst securing the maximum of fresh air; (c) providing arrangements for the frequent bathing of the patients, and the adoption of those hydro-therapeutic measures which are an essential portion of any serious attempt to cure the disease.

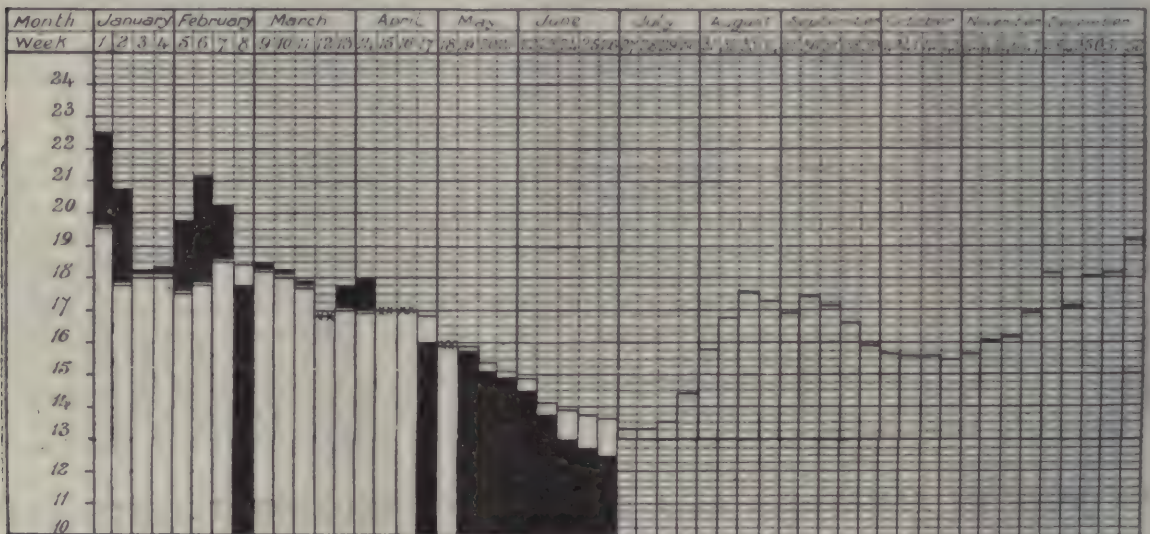
4. The patients must not be allowed to return to their unhealthy avocations and surroundings, but must be provided with suitable, light, out-of-door employment after their "cure." The admirable system devised and worked by Dr. Chapman at Clacton-on-Sea of having a market garden attached

to the sanatorium, wherein the inmates can gradually acclimatise themselves to work and gain a livelihood, was referred to with warm approbation by the speaker.

While heartily concurring in these views, we are in even greater sympathy with those of subsequent speakers at the Conference who insisted on the importance, before embarking on the large expenditure involved in the provision of sanatoria, of first removing the conditions which produce the disease. As Professor Koch has rightly said: "It is the overcrowded dwellings of the poor that we have to regard as the real breeding-places of tuberculosis; it is out of them that the disease always crops up anew, and it is to the abolition of those conditions that we must first and foremost direct our attention if we wish to attack the evil at its root and wage war against it with effective weapons." What is the good of incurring large expenditure in the costly provision of sanatoria while all the time the economic factor precludes the eradication of these breeding-dens? It is because we cannot afford to prevent it that so large a proportion of our population continues to live in overcrowded one-room tenements, where a considerable proportion of them must inevitably develop consumption. Until the municipalities have removed this and the other conditions productive of the disease it will not be wise for them to dissipate their resources on costly measures which aim at dealing with the results of the evil which they must perforce permit to continue.

DIAGRAM OF THE WEEKLY DEATH RATE IN 1907.

Showing the weekly death rate for 1907 and the mean weekly death rate for the last Quinquennial of the 76 great towns of England and Wales.



White columns show mean weekly death rate for last Quinquennial.

Black columns show weekly death rate for current year.

Where death rate for 1907 is in excess of the Quinquennial mean the excess is shown in black above the white column which represents the mean.

Where death rate for 1907 is below the Quinquennial mean the black column is shown in its entire length, the white column which represents the mean, showing above the black.

Where the death rate for 1907 coincides with the Quinquennial mean, it is shown thus xx.

THE IMPERIAL CANCER RESEARCH FUND.

THE annual meeting of the General Committee of the Imperial Cancer Research Fund was held at Marlborough House on Monday, July 1st, and the report of the proceedings shows that steady progress is being made in the systematic investigation of the many problems which must be solved before the cause of cancer can be discovered. Not the least formidable among these problems is the necessity for controlling the results obtained by various reputed cures for the disease. It is only right that these cases should be submitted to the test of experiment at the hands of independent workers. There is always a possibility that one of them may be found to possess the properties of cure or alleviation which in each case is claimed for it by the authors, and that a short cut to success may thus be obtained. So far the hope has been disappointed, but when the failure is announced by those who are occupying a purely scientific position it is impossible for the cancer curer to denounce the verdict as the result of an odium medicum which, they say, is similar to the odium theologicum of former days.

THE TRYPSIN TREATMENT.

The report states that:—

Serious attention had been given to the additional alleged cancer cures which had been brought to their notice during the past year. Unfortunately, it was impossible to assign a curative value to any of them. It was desirable from a public point of view to allude specifically to one alleged remedy for cancer which had been tested last year and had again been subjected to renewed tests. This alleged remedy—trypsin alone or in conjunction with amylopsin or as pancreatic extract, in which trypsin, as such, was absent—had received a quasi-scientific basis by the assertion that its employment had cured two mice inoculated with Jensen's carcinoma. When the assertion was made, its validity was carefully tested on mice with rapidly-growing tumours. The large number of observations then made showed that the cures claimed were based on fallacies inseparable from so small a number of experiments. The reinvestigation of this alleged remedy, with the modifications since suggested, had shown that it was incapable of curing mice of inoculated cancer or of influencing the progressive growth of tumours.

The alleged remedy has failed as completely in practice as it has done in the laboratory, and this official declaration should stop effectually the further use of trypsin in the treatment of cancer by those who are endeavouring honestly to give their patients the best advice.

CANCER MORTALITY.

The report deals this year with two interesting factors in the cancer mortality, the liability of the individual and the liability of the family; in other words, the death-rate in males and females, and the question of heredity. In 1889 the Registrar-General stated that 1 out of 21 men and 1 out of 12 women reaching the age of 35 eventually died of cancer. In 1905 the Registrar-General, using the same methods, calculates that 1 in 12 men and 1 in 8 women attaining the age of 35 will eventually die of cancer. The chances of dying of cancer, therefore, are approximating in the two sexes and are becoming more numerous for everyone, though propor-

tionately more men succumb to this disease now than formerly. Indeed, the frequency of cancer as a cause of death is so great that few families of any size escape.

CANCER INCIDENCE.

The average human life is too long to allow of detailed analyses of the incidence of cancer in a large number of families, but the difficulty is overcome by experimenting with such short-lived and fruitful animals as the mouse. The report continues:—

In the mouse it was now in a fair way to a definite settlement by means of breeding and in-breeding experiments on a large scale. As in a man, so in the mouse, the total number of cases of cancer occurring in different strains varied. The disease had been so frequent as to lead some observers to assert the occurrence of epidemics in certain cages. Their prolonged investigations had given no support to this interpretation of the apparent greater frequency of cancer in some communities of mice as compared with others. The surgical removal of spontaneously-occurring tumours had enabled them to prolong the life of many mice and to breed from them. In that way they had obtained mice of a known cancerous parentage. By successively crossing other spontaneously affected animals with the offspring of cancerous parents, strains were being obtained in which the cancerous heredity was $\frac{1}{2}$, $\frac{2}{3}$, or $\frac{1}{8}$, and even higher. This concentration of a hypothetical hereditary factor in a known amount, and in large numbers of animals of known age, should in the course of a few years definitely settle whether there was a family or only an individual liability to the disease. At the same time mice of known cancerous stock might be indispensable to further attempts to produce cancer experimentally—for example, by the artificial application of external agencies having a mediate relation to its spontaneous appearance. All attempts to produce cancer experimentally had thus far failed in animals chosen at random. They had frequently pointed out that the origin of cancer was something entirely different from its continued growth either in the spontaneously attacked or in inoculated animals.

INOCULATED CANCER.

The resemblance between the continual growth of spontaneous and of inoculated cancer is, however, very close, but the origin of cancer must be studied in spontaneous cases. The experiments yield evidence that the growth of cancer consists of a succession of phases of increased and diminished energy of assimilation and growth. Perhaps the most significant part of the report relates the fact that mice which had been completely protected against the inoculation of cancer have developed the disease spontaneously. The methods for protection only prevented the grafts from taking, and did not hinder growth when once the grafts had taken and organic union with the part had been established. The fact that cancer develops spontaneously in animals completely protected against inoculation by grafts points to the probability that the organic union between the tumour and the host is established from the very beginning of the disease. Surgeons therefore do well to recommend the earliest possible removal of cancer to their patients, and it is possible from Dr. Bashford's work that an explanation will in due time be forthcoming as to the reason for the reappearance of cancer after many years of apparent immunity.

THE BOOK WORLD OF MEDICINE AND SCIENCE.

"A DICTIONARY OF MEDICAL DIAGNOSIS." By HENRY LAWRENCE MCKISACK, M.D., M.R.C.P. (London). (Published by Baillière, Tindall, and Cox, London. Price 10s. 6d. net. Démy 8vo. Pages xii.+583, with 77 illustrations in the text.)

THIS book professes to be "A Treatise on the Signs and Symptoms observed in Diseased Conditions; for the use of Medical Practitioners and Students"; but it is more than this, for in addition to signs and symptoms it deals with a very large number of the laboratory methods of examining and testing blood, urines, fæces, pus, vomit, and so on. The word "signs" in connection with diseased conditions is capable of a wide interpretation, of course, but we are not sure that the practitioner would expect to find clinical laboratory methods included under it. He will consequently be all the better pleased with the book.

The dictionary is a descriptive compendium of five different groups of subjects, which may be summarised as follows:—

1. *Symptoms*, their various causes and their significance.

2. *Definitions* of all sorts of terms used in medicine.

3. *Physical signs* and their significance, including not only the ordinary physical signs to be noted in diseased states of the chest and abdomen, but also reflexes, and such signs as those of von Græfe, Mœbius, Romberg, Trousseau, and so forth.

4. *Clinical laboratory methods* and tests, with the points that can be learned from them.

5. *Special articles*, such as those upon *x-rays* in diagnosis, opsonins, and vaccine treatment.

The amount of matter that the author has condensed into so small a volume is truly wonderful. The whole is arranged in alphabetical order as far as possible, and there is a good system of cross reference. For example, when blood examinations are described under B, the methods of making the examinations, the significance of the various departures from normal that may be found, and the fallacies that are likely to arise, are fully dealt with in an article of thirty-five pages, and when one looks up "Opsonic power" under "O" one is referred to "Blood examination," where it is described. This plan makes the book much more readable than it would be were it a mere dictionary such as its name implies.

There is a fair index at the end of the volume, a moment's reference to which is enough to show that the author has tried hard to include everything, rarities as well as common things. Aphasia, Back, pain in, Clasp-knife reaction, Hæmatemesis, Poikilocytes, Urines, and so on are a few examples of the common things discussed. Whilst Anisocoria, Biot's respiration, Cryoscopy, Hemiagnosia, Pentosuria, Wintrich's sign, and so on are a few headings of paragraphs which will indicate the kind of out-of-the-way things that the practitioner may gain useful information about if he consults this book.

Although we find the volume praiseworthy, and likely to supply a want, we are at the same time bound to draw attention to certain defects in it. We do not agree with the author in all the statements he makes. To give an example, he would lead the practitioner to suppose that a Widal's test was sufficiently positive to indicate typhoid fever if the reaction were complete in one hour with a dilution of the serum of only 1 in 50; whereas it has been clearly established that a positive Widal's test should be complete clumping within half an hour with serum diluted 1 in 200.

We have not space to point out other instances in which our views differ from those of the text before us, but we would draw attention to another failing—namely, errors of omission. It is true that it must have been extremely difficult to know what to include in and what to omit from the book, but in purchasing a volume which professes to be a dictionary of medical diagnosis in which many clinical methods are described, one is a little disappointed not to find any mention of tubercle bacilli nor of the Ziehl-Nelsen method of staining them, in the index. It is true that these are described under sputum in the text, but it takes some time to find this out; and when tubercle bacilli in urine are discussed there seems to be no account of one of the chief difficulties in connection with them—namely, their distinction from smegma bacilli. The spirochæta pallida is surely important as an aid to diagnosis, yet it is not mentioned. Raynaud's disease and Stokes-Adams' disease are mentioned and briefly described, but there is no similar mention of Banti's disease, Graves's disease, and so on, each of which might well have been shortly defined if the former are. If the dictionary defines some of the diseases which bear men's names it should define all, to be consistent. Signs which bear proper names, such as those of Babinski, Biermer, Biot, Ellis, Erb, and so on are discussed, but the list is incomplete. Ewart's sign, for example, is wanting, amongst others. If one looks up "Pancreas" or "Brain" in order to discover how to diagnose diseases of these, one does not find either of them in the index. Boas' reagent for testing for free hydrochloric acid in gastric juice is omitted; Cammidge's reaction for pancreatic disorders is not mentioned, so far as we can find, though its value, or its lack of value, is one of the things so much under discussion that many a doctor would like to read about it in some such book as this.

The shortcoming of the volume is mainly in the direction of incompleteness; this is a very grave fault in a dictionary, but it is one that can be remedied in another edition. On the other hand, it is a great boon to have by one a small volume in which are described not only all the common things, but also such matters as Haldane and Lorraine Smith's CO method of estimating the total volume of blood in the living body; the exact procedure in determining an opsonic index; the method of estimating the saline concentration of the serum, and so on; we feel sure that the book will be of value to the hospital physician as well as to the student and practitioner for whom it is ostensibly written.

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

THE UNITS OF GENERAL HOSPITAL CONSTRUCTION.

THE LAUNDRY UNIT OF A GENERAL HOSPITAL.

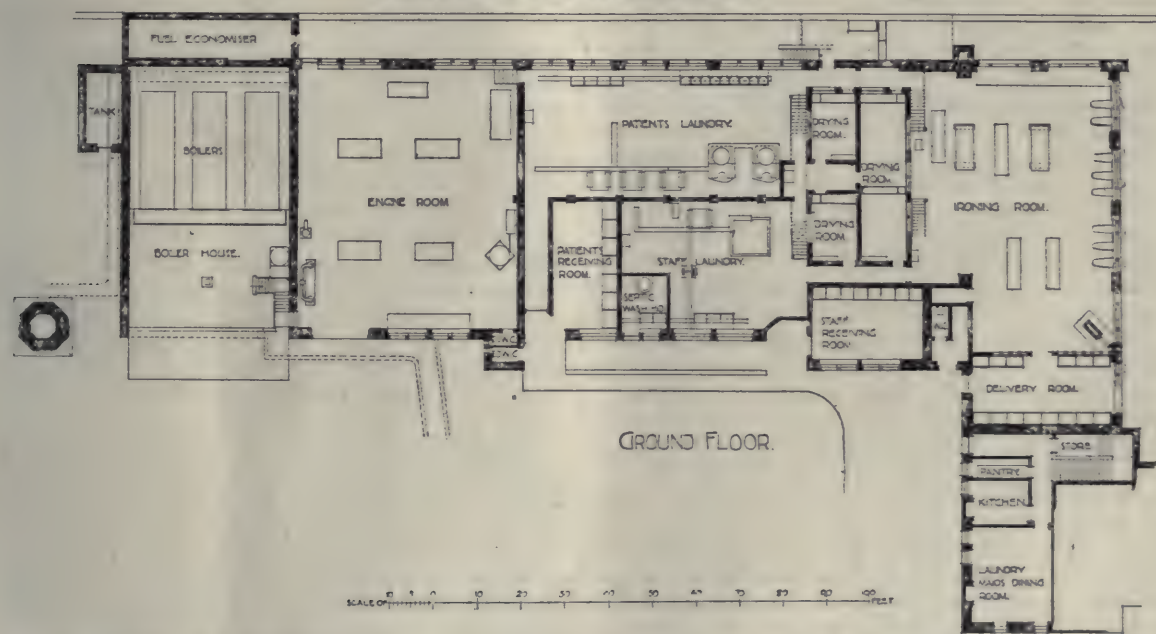
The various wash-houses comprised in the laundry unit should be arranged as a single-story building, and should form a complete unit in which provision is made for the housing of the staff. The extent of this unit will depend upon the size of the hospital, and the number of articles to be dealt with each week. But in all cases it should be a detached building adjoining the boiler-house and power-station, and, where possible, it should be placed on the lowest portion of the site in rear of the main buildings.

The accompanying plan shows a hospital laundry capable of dealing with 23,000 articles per week. With an additional washing machine and hydro-extractor, for which there is ample floor space, much more work could be accomplished. This laundry unit consists of two separate wash-houses, and in addition to those, which are for general cleansing,

The general wash-houses are two in number, one for ward and patients' linen, the other for that of the staff. Adjoining these wash-houses are the drying rooms, also arranged in pairs. Opening from these is the mangling and ironing room, and as all the articles are thoroughly cleansed before reaching this stage of their treatment, this room is not sub-divided into patients' department and staff department. With regard to the buildings themselves, the interior walls of all the rooms should be lined with glazed brick, the floors of the wash-houses should be of concrete, and the floors of the ironing room of some hard wood.

In dealing with the interior fittings it may be well to follow the course of the linen from the time it leaves the ward until its return. In this way we may take a comprehensive view of the whole laundry operations. In a previous article, *THE HOSPITAL*, (May 11) reference was made to the soiled linen bag there illustrated, which is used in each

PLAN OF A HOSPITAL LAUNDRY



NOTE. The first floor over ironing-room, etc., contains the accommodation for the superintendent and laundry maids.

there is a special room provided for the treatment of all articles which have come from skin or septic wards, or which for any other reason may require special treatment. This room should form part of every modern hospital laundry, although the necessity for it is frequently overlooked in the design. It should have a separate entrance, and contain two large steeping tanks and a boiler. Suspicious articles are steeped in a disinfectant, and are thereafter boiled previous to being passed into the general wash-house.

ward. The proper use of this bag obviates the repeated handling of soiled linen, as each article is noted in the laundry book at the time of its being placed in the bag, and is not again touched until it reaches the laundry. The bag is simply unhitched and conveyed to the laundry, where it is cleaned along with its contents.

Each ward is provided with a special laundry book with perforated foils for each day of the week which are detached and sent with the linen, and a counterfoil which is retained by the nurse in charge.

This book contains a list of all the articles, and the nurse simply fills in the number of each. It is unnecessary to illustrate this in detail. The accompanying form will suffice to show the principle.

| | | | | | | | | | | | | | | | |
|----------------------------------|------|-------|------|--------|------|------|---------|-----------------------------|----------------------------|----------------------------|--|-----------|--|-----------|--|
|190 | | | | | | | | | | Ward No. | | Ward..... | | Ward..... | |
| Date | Mon. | Tues. | Wed. | Thurs. | Fri. | Sat. | Correct | Articles not Returned | Saturday.....190 | Friday190 | | | | | |
| Sheets | | | | | | | | | Sheets. | Sheets. | | | | | |
| Draw Sheets ... | | | | | | | | | Draw Sheets. | Draw Sheets. | | | | | |
| Mattress Slips ... | | | | | | | | | Mattress Slips. | Mattress Slips. | | | | | |
| Bolster Slips ... | | | | | | | | | Bolster Slips. | Bolster Slips. | | | | | |
| Pillow Slips ... | | | | | | | | | Pillow Slips. | Pillow Slips. | | | | | |
| Grey Pillow Slips, etc., etc. | | | | | | | | | Grey Pillow Slips, etc. | Grey Pillow Slips, etc. | | | | | |

The counterfoil includes all the days of the week, and a column for returns.

THE LAUNDRY.

At the entrance to the patients' wash-house is a receiving room for the soiled linen, and this is fitted with open bins for the classification of the different articles. At the entrance to the staff wash-house a similar receiving room is provided. The wash-house for patients' clothing is fitted on one side with steeping and washing tubs constructed of glazed fireclay, all of which discharge into an open gutter. This gutter is protected at its end by a grating. On the other side of the wash-house are three rotary washing machines and two centrifugal wringers. A gutter similar to that on the other side, and similarly protected, is placed under these machines, so that there is no possibility of drains being choked. The staff wash-house is smaller, but is equipped with machine and wringer on the same principle. One main shafting is thus sufficient to drive the machinery in both wash-houses. In both wash-houses a soap and soda dissolver is fitted up.

The drying rooms are arranged on two flats. A hot-air chamber is placed in the basement at one side of the rooms, and electric fans on the opposite side. As the plan illustrates, either hot or cold air can be drawn through the rooms at will by the simple expedient of closing or opening the dampers placed over the air inlets. The lower rooms where the temperature is higher when the hot air is in use are utilised for the drying of linen articles; the upper rooms, where the air is necessarily cooler, is employed for the treatment of woollen goods. The air which has passed over the clothes is carried off by flues in the roof. This arrangement of drying rooms not only economises floor space, but is a much more efficient method than outdoor drying, which in a large town can never be satisfactory. Atmospheric conditions, smoke, and uncertain weather render the outdoor method uncleanly and unreliable where thousands of articles are dealt with and the time and labour involved in conveying to a bleaching green, where such exists, adds materially to the wages bill. Clothes dried by this method where there is a constant current of fresh air are dried much more expeditiously, and are left clean and sweet. The old method of using clothes-horses in a chamber of hot but still air was not only a more

tedious process, but had the disadvantage of giving the clothes a musty smell.

The linen which has passed through the washing and wringing machines and the drying rooms is then

passed into the mangling and ironing room. The variety of mangles, ironers, collar and cuff machines, goffering machines, gas and electric irons, also the variety of washing and wringing machines, are so numerous that it is not our present intention to particularise any pattern of either. In a modern hospital laundry the bulk of the work is done by machinery, although some laundresses prefer hand irons for special work, such as the dressing of shirts: provision must therefore be made for the heating of these hand irons. To carry on the work of a laundry similar to that of the accompanying design, and turning out on an average 23,000 articles per week, the staff should consist of a superintendent and 18 female workers. These are housed in the unit, fed in the unit, and are provided, in addition to board and lodging, with indoor uniform and wages ranging from £10 to £20 per annum, according to their work and experience. The laundry superintendent should be a lady who has had practical experience of laundry work and the management of servants. In some hospitals the supervision is left to a nurse, while in others members of the nursing staff undertake this duty in turn. This method of supervision is never satisfactory. The laundry department is much too important for amateur management, and should never be under the control of anyone who has not had a thorough knowledge and training for the work. A competent manageress with an adequate salary and comfortable rooms within the unit is in the end the more economical in the interest of the institution. An excellent arrangement is in vogue in some hospitals whereby members of the senior nursing staff act in turn as understudy to the laundry superintendent. In this way they acquire a knowledge of laundry work under competent guidance which proves invaluable to them should they become matrons of small hospitals.

Reference has been made to an average of 23,000 articles per week. This works out roughly as 16,000 articles for ward and patients' use: and between 6,000 and 7,000 for nurses and officials. The cost of materials, such as soap, soda, etc., for this quantity averages £2 14s. 6d. per week. The cost of water varies so much in different districts that no average can be taken. In some cases the local authorities allow a certain quantity free of charge to charitable institutions.

HOSPITALS FOR THE MENTALLY DEFICIENT.

The Morningside Centenary.

WE have always felt that the term "asylum" should be abandoned, so far as institutions for the insane are concerned, in favour of "hospital." Unfortunately the lunatic is regarded as a waste product, and although he is now frequently housed in something like a palace, with palatial grounds and extensive park lands, his movements and condition are matters which seldom or never trouble the minds of the editors of great newspapers or of the people at large. Indeed, there is an undercurrent of feeling which may produce very striking changes in the next generation in favour of the view that it is hardly justifiable to spend huge sums of money annually upon members of the race who, for all practical purposes, have ceased to exist in a conscious and mental state. The managers of our hospitals for the insane are therefore wise to seek every opportunity to attract public interest in their work, population, and establishments. Much more than local interest attaches to the centenary celebrations of the Royal Edinburgh Asylum on Friday, July 12. This establishment originated in 1792 through the death of the poet Fergusson, the precursor of Burns. Fergusson was an erratic genius, whose sprightly gaiety made him much sought after as a companion, and in his day, though he died at 23, he was the life of the company of the Auld Reekie, a noted club in Edinburgh in the eighteenth century. Fergusson's head was severely injured by a fall, which aggravated earlier symptoms of mental aberration, and led to his confinement in the old Darien House, where he died. This was the only public asylum in Edinburgh, and the removal and death there of so noted a character aroused public sentiment and led ultimately to the founding of a mental hospital by Dr. Andrew Duncan, President of the College of Physicians, Edinburgh, in 1792. This effort, though taken up by public men and public bodies, failed, but within 15 years a grant of £2,000 was obtained from estates forfeited in the rebellions of 1715 and 1745. A year later a royal charter was obtained, and the foundation-stone of the East House of the new mental hospital was laid in 1809, the hospital itself being opened four years later. West House was added in 1837, and in 1840 Dr. Mackinnon was appointed the first physician superintendent. In 1841 the hospital was named the Royal Edinburgh Asylum, and Queen Victoria became its patron. Dr. Skae became physician superintendent in 1846, and in 1873 was succeeded by Dr. Clouston, who is deservedly and widely known as one of the greatest of alienists. Under Dr. Clouston's *régime* Morningside has been developed, new and original methods have been introduced, and there is no place where more matter for consideration and instruction is to be met with

by those who have eyes to see. It is only right and proper that this hospital for the insane should celebrate its centenary worthily. We look forward to even greater developments and added authority for a foundation full of interest to the historian and of practical instruction for the expert.

Some Burning Topics.

The continuous increase in local rates is causing a discussion amongst some of the more thoughtful members of county councils and other bodies as to the present high rate of expenditure in the accommodation and treatment of the insane. The question is being asked as to how far it is justifiable, in view of the great amount of distress which prevails among many of the poor who are healthy and well in body and mind, to incur avoidable expenditure in various directions in order to surround the hopelessly decrepit, devoid of all mental apprehension, not only with every comfort but with many luxuries of various kinds. There is the further point that, in some lunatic asylums, large sums have recently been expended on tubercular wards, where the chronic lunatic affected with tuberculosis is treated at great cost and in many cases restored to robust health. In the ordinary course, as things were formerly, such cases would not continue to live for more than a few years, if so long, whereas they may now be restored to a condition of physical strength which may keep them alive for 20 or 30 years longer, without any benefit to themselves or to anyone else. Is this policy, and the large expenditure involved, justifiable? If so, on what grounds, and to what extent? At an asylum we recently inspected the authorities have erected tubercular wards apart from the main building, and have moved all phthisical cases from the asylum dormitories into the special wards. In this one asylum the consequent reduction in the average mortality of the patients will, it is estimated, increase the cost to the ratepayers, so far as the 50 patients treated in the special wards are concerned, by no less a sum than £145,000. If this policy is to be followed throughout the country, the additional burden cast upon the ratepayers must amount to several millions sterling. If it is right to expend all this money on the unfortunates of our race who lack the mental strength to maintain themselves, it is a great reflection upon modern methods that the healthy are permitted to be infected by the tuberculous when the former happen to be members of a family, and not lunatics in a public asylum. It would be dangerous doctrine to refuse a lunatic such of the advantages of modern therapeutic methods as are equally to be obtained by those not under restraint, such as, for instance, the operative treatment of malignant disease; but it does seem a waste of time and money to grant him actual preferential treatment which ordinary members of the community do not share. The present Government seems very ready to appoint Royal Commissions, and we hold that there is pressing necessity, in the best interests of the public at large, for a Royal Commission to inquire into the vital questions which underlie the points raised.

EMPLOYER AND SERVANT.

THE FORMER'S LIABILITY AND RISKS.

In most of the policies which the Insurance Companies are issuing to cover workmen's compensation risks now brought by the new Act so prominently to the notice of all employers, it will be observed that the assured is indemnified against all liability under, or by virtue of, the Common Law; Employers' Liability Act, 1880; Workmen's Compensation Act, 1906; Lord Campbell's Act, 1846; in respect of all injuries which may happen to any servant while in his employ. The liability against which protection is thus given varies under the different Acts, and it will be useful at the present time to recapitulate what this liability may be.

THE COMMON LAW RULE.

1. The Common Law does not give a servant the same right of action against an employer in respect of injuries suffered by him in the course of his employment, as it does to outside persons who happen to be injured by reason of the negligence either of the employer or anyone employed by him. The servant could only sue his employer where the employer had been himself negligent. Negligence on the part of a fellow-servant resulting in injury was regarded as one of the risks incidental to the servant's employment, and no action against the master lay in consequence of it. This was the doctrine of "common employment" so called. The Common Law rule as to the liability of the master for his own personal negligence resulting in accident to his servant still exists, and has not been affected by recent legislation, and it is important to remember this, because there is no limit to the damages which servants can recover at Common Law, as there is in cases under the Workmen's Compensation Act.

THE EMPLOYERS' LIABILITY ACT.

2. The Employers' Liability Act, 1880, struck at the doctrine of common employment and largely increased the liability of the employer, and is still unrepealed. It only affects certain causes of injury and certain classes of workmen. These last can claim compensation for injuries caused by the negligence of another servant who is in a position of authority over them, or by obedience to orders and rules promulgated by the employer or by someone else with his authority.

THE WORKMEN'S COMPENSATION ACT.

3. The Workmen's Compensation Acts, 1897 and 1900, are now repealed as from July 1 last, when their place was taken by the Act which was passed last year. The provisions of this Act are (or ought to be) matters of common knowledge, and it need only be said that the employer's liability is still further increased by making him liable to pay compensation whether he or any of his servants are negligent or not, while the classes of workmen who are entitled to its benefits have been so enlarged as to include almost everyone who works under a contract of service with a salary under £250 a year, and in the case of manual labourers, with no such limit at all.

THE FATAL ACCIDENTS ACT.

4. Lastly, Lord Campbell's Act, 1846, or, to call it by its more correct name, the Fatal Accidents Act, needs a word of explanation. The Common Law rule was that the death of a person injured by the negligence of another put an end to his cause of action, which did not survive to his executors or representatives. Very great hardship resulted, because widows and children were often left without any compensation for the death of a bread-winner in circumstances which would have entitled the bread-winner himself to compensa-

tion, had he survived. Lord Campbell's Act gives a right of action to the personal representatives of anyone whose death has been brought about by the negligence of another, if the deceased would have been entitled himself to bring an action for negligence, if he had lived. This right is to be exercised for the benefit of husband, wife, parents, and children only, and is limited to the amount of the pecuniary loss suffered by reason of the deceased's death, calculated on a strictly practical (and not sentimental) basis. In many cases it will probably be more advantageous to make a claim under the new Compensation Act, with its limit of £300, but Lord Campbell's Act still remains as a concurrent remedy, though only applicable in the comparatively small number of cases where negligence can be proved.

THE NEW ACT.

It will be seen, therefore, that the liability of the employer to his servants is not wholly governed by the new Act, but that his liability in all cases where personal negligence can be brought home to him or to those in authority under him, is considerably wider. The policies, however, which the companies are now prepared to issue fully protect him against all legal liability, and it will be found that in most cases for a small additional premium they will cover him against certain moral obligations—*e.g.*, medical expenses and the like, for which he would not otherwise have to pay. The absolute necessity for insurance on the part of every employer of servants of any kind is more than ever to be insisted upon, and much pain and suffering will be caused not only to the servant, but to the employer also, if this counsel is disregarded until it is too late.

PRACTICAL POINTS.

EMPLOYERS' LIABILITY INSURANCE.

The clerk to a provincial hospital writes:—

My committee will be much obliged if you will inform me whether London hospitals are making any special features of their insurances other than in respect of the ordinary paid staff and of claims therefrom under:—

The Workmen's Compensation Acts, 1897, 1900, and 1906.

Employers' Liability Act, 1880.

Fatal Accidents Act, 1846.

Common Law,

which, I presume, include all general liabilities.

My committee question whether they should not insure against all diseases and illnesses which can be attributed in any shape to accident which may happen to their staff in the course of their duties.

I assume it is necessary to insure probationers (who receive no salary, but are found with board and lodgings) and also the clerk.

In reply to our correspondent's inquiry, we believe it to be the fact that the only illness attributable to accident covered by the Act, for which hospital authorities would probably be liable, is blood poisoning incurred in the discharge of the duties of members of the staff. We believe that several hospitals have arranged with insurance companies to cover this risk in the ordinary rates which they are charging for insurance under the Acts mentioned. We believe it to be necessary to insure probationers, but we doubt if the clerk, who does not reside on the premises, and is a professional man engaged in his own office, would be a member of the staff to be insured under the Act.

NEWS AND COMING EVENTS.

THE LATE SIR WILLIAM BROADBENT.—The announcement of the death of Sir William Broadbent, physician-in-ordinary to H.M. the King, which occurred at his residence, 84 Brook Street, Grosvenor Square, W., early on Wednesday morning, the 10th instant, will be received with keen regret. In medicine Sir William Broadbent's name has always occupied a high position, and his personal efforts towards the furtherance of medical science have received appreciative recognition both at home and abroad. The Universities of Edinburgh, St. Andrews, and Leeds conferred on him honorary degrees of LL.D. and D.Sc.; he was a corresponding member of many learned French and German societies; a Fellow of the Royal Society since 1884; President of the British Medical Benevolent Fund; Chairman of Council of the National Association for the Prevention of Tuberculosis; Vice-President of the Cancer Research Fund; President of the Harveian, Medical, Clinical, and Neurological Societies; and for two terms filled the post of Censor to the Royal College. He took an active and keen interest in French medicine, and was Commander of the Legion of Honour. Born in 1835, he received his medical education at Manchester, in Paris, and in London, and soon after qualifying in 1858 was appointed to the medical staff of St. Mary's Hospital, which institution he served up to the time of his death both actively and as a consultant. As a teacher his claims to remembrance are too well known to the many who have had the privilege of listening to his lectures or studying under him in any other capacity to need more than passing mention. In 1898 he was appointed physician-extraordinary to the late Queen Victoria, and physician-in-ordinary to H.R.H. the Prince of Wales. He was created a baronet in 1893, and later on was made a K.C.V.O.

AN extraordinary general meeting of the Hampstead General Hospital will be held at the hospital, Haverstock Hill, on Tuesday, July 16, at 6 p.m., when the council will lay before the members of the Institute the arrangements which have been made for amalgamation with the North-West London Hospital. The following resolutions will be submitted in pursuance of a notice received—namely: 1. That the practice hitherto followed of appointing acting medical officers from among the members of the medical profession practising in Hampstead be continued. 2. That the number of physicians and surgeons on the consulting staff be augmented.

THE third annual general meeting of the Association of Scottish Medical Diplomates was held on June 19, at 11 Chandos Street, London, W. The report of the Council for the past year disclosed a flourishing condition of affairs. It was unanimously adopted by the meeting, together with the Treasurer's balance-sheet and a draft copy of rules, submitted by the Council. The retiring President, Dr. A. Farrer, was elected an honorary vice-president of the Association. Dr. David Walsh was unanimously appointed to the office of President for the ensuing year, 1907-1908, while Mr. Sydney Stephenson, F.R.C.S., was re-elected Treasurer, and Dr. Arthur Harries Honorary Secretary for a corresponding period. Dr. Skene Reeth and Mr. Charles Ryall were appointed to vacancies on the Executive Council. The new President congratulated the members present on the prosperity of the Association, for which he anticipated a brilliant future. Scottish diplomates desirous of obtaining further information as to the objects of the Association are requested to write to the Hon. Secretary, 11 Chandos Street, London, W.

THE Countess of Ilchester has consented to accept the Presidency of the Ladies' Committee of the Chelsea Hospital for Women.

AMONG the natural history exhibits at the forthcoming Alaska Yukon-Pacific Exposition, to be held at Seattle in 1909, will be a perfectly preserved mammoth. The carcass of the animal was discovered in an Alaskan ice formation, and is now being preserved in a refrigerating chamber.

A SPECIAL appeal for £70,000 is being made for a comprehensive scheme of extension at the Salford Royal Hospital. The Board of Management has decided to increase the number of beds so as to provide accommodation for two hundred in-patients, and also to make suitable provision for the nursing staff.

THE new electrical department of the Royal Devon and Exeter Hospital, Exeter, will be opened on Friday, July 19; next, at 4 p.m., by Lady Duckworth-King. The building and fittings are the gift of Mrs. Sanders in memory of her husband and son, formerly Presidents of the hospital.

A CONVERSAZIONE was held on July 3 in the buildings and grounds of the Cancer Hospital, Fulham Road, Lord Ludlow, president of the hospital, accompanied by Lady Ludlow, received the guests, among whom were a large number of medical practitioners. The medical and surgical staff and other officers of the hospital assisted the president in conducting the guests through the wards and the various departments, where the facilities both for treatment and research were fully explained. There are now 114 beds available, and, as the hospital is quite free, letters of recommendation are not required. In the wards every form of treatment which appears to offer any possible hope of relief is given an exhaustive trial. The electrical department, the pathological and research departments, the new museum and the chapel, which is in telephonic communication with every bed, were all open for inspection, and the string band of the Coldstream Guards played in the grounds. An appeal is being made for funds to meet the increasing expenditure of the hospital, which greatly exceeds the ordinary income. Last year the ordinary income amounted to £9,013, and the expenditure to £16,699, making a deficit of £7,686.

METROPOLITAN HOSPITAL SUNDAY FUND.—The following are among the amounts received at the Mansion House to date (July 5):—Holy Trinity, Sloane Street, £414; St. Jude, South Kensington, £360; St. George, Hanover Square, with St. Mary, Bourdon Street, £301; St. Columba, Pont Street, Church of Scotland, £195; St. Peter, Brockley, £109; Holy Trinity, St. Marylebone, £79; Stamford Hill Congregational Church, £70; St. Luke, Chelsea, £70; Victoria Park Christian Evidence Association, £67; St. Mary, Hornsey Rise, £61; Rosslyn Hill Unitarian Church, £59; Christ Church, Crouch End, £57; Christ Church, Hampstead, and Mission, £53; Barking Parish Church and Chapels, £51; Newington Parish Church and Chapel-of-Ease, £41; St. Stephen and Church of Transfiguration, Lewisham, £36; Trinity Presbyterian Church, Notting Hill, £32; Greenwich Parish Church and Chapel-of-Ease, £32; St. James, Notting Hill, £31; St. Mary Magdalene, Peckham, £31; St. Mary, Walthamstow, £29; Christ Church, Southgate, £27; St. Mark, Notting Hill, £25; All Saints, North Peckham, £25; St. Olave, Hart Street, £23; Charterhouse Chapel, £23; St. Paul, Mill Hill, £22; Lewisham High Road Congregational Church, £22; St. Helen, North Kensington, £20. Total, about £40,000.

SOCIAL AND POOR-LAW PROBLEMS.

THE AFTER-CARE OF THE INSANE.

A SOCIETY doing a good work and little regarded by the public, is the After-care Association; it is interested in poor persons discharged as recovered from asylums for the insane. A lunatic may be entirely recovered, and yet not be immediately able to go back to his old environment, where the responsibilities and anxieties which perhaps had before helped to shake the mind, at once re-establish their influence. In such cases a change of scene and air, a quiet time without the obvious control exercised in the asylum and free from the troubles of ordinary life, may make all the difference between a relapse and a permanent recovery. Among the poor there are also many cases where the patient has lost his situation through his malady, and in such instances the association strives to find suitable employment, and gives pecuniary help till it is found. Clothing, also, and tools are provided when necessary. In dubious cases the patients may be boarded out in the country under proper care, or placed in suitable institutions until a more permanent provision can be made for them. In all cases the idea is to keep the mind at ease until it is once more habituated to the responsibilities of ordinary life. The results of the work of the association are excellent, and it has been the means of placing on a footing of self-support many who were destitute and friendless when they left the asylum. The beneficiaries are drawn from more than one class, and to find suitable homes and employment for all is a delicate as well as a difficult task; but the results fully justify the effort. Subscriptions to this useful society may be sent to the Secretary, H. Thornhill Roxby, Esq., Church House, Dean's Yard, Westminster, S.W.

THE PAROCHIAL MISSION-WOMEN'S ASSOCIATION.

A VERY useful, though modest, work is done by the Parochial Mission-Women's Association. These women are drawn from the working class, and visit the poor in their homes as friends and equals. They go empty-handed. Their own salary averages only 13s. weekly, and they have no alms entrusted to them by the Association. Their special mission is to bring home to the poor and thriftless, even to the idle and degraded, the lesson of self-help. The mission-woman begins by making friends with those around her; then, when acquaintance has progressed a little, she produces a deposit-card, and offers to take care of any money—pence or half-pence—that can be spared for a rainy day. There is no interest promised on the deposit, no bribe to induce saving; only the promise that when the money is wanted for real need it will be forthcoming, and that it can be returned in the shape of necessities of good quality at store prices—a very different quality and price from what the poor as a rule can obtain for themselves. There is often difficulty in getting the card taken, but when the odd coppers begin to return in such solid form, as just mentioned it both seems like a gift, and yet brings with it the encouraging thought that the beneficiary has earned it all. The taint of charity, often so demoralising, is absent, and from the time a poor woman begins to deposit her pence with the mission-women there often dates a marvellous revival in the family circumstances. The mission-woman is not a teacher of religion, but she must be a Christian woman, who, living her own honourable and helpful life by the grace of God, proves by that life the power of true religion. Mission-women are placed only in parishes where the incumbent desires their presence, so that they are in no way intruders into the domains of others, but in an unpretentious way are often a clergyman's best helpers, all the more efficient because they belong to the

class among whom they labour, and whose ideas, ambitions, and temptations they can the better understand and sympathise with. It is nearly fifty years since the Association was founded, and those who first supported it have passed away. The first Countess of Selborne was one of the founders of the mission, and her daughter, Lady Sophia Palmer, has recently written a very interesting account of it. A mission can be supported for a year for £36, which shows how economical the scheme is. The clergy appreciate the work of the mission-women greatly, and appeals for their help are often received, but for lack of funds they cannot always be responded to. And while funds are dwindling, the necessity for the work in the slums of London is ever increasing. Therefore subscriptions or donations will be gladly received by the Secretary, at the office of the Parochial Mission-Women's Association, Church House, Dean's Yard, Westminster, or by the Treasurer, the Earl Waldegrave.

THE PROBLEM OF THE ABLE-BODIED POOR.

THE attention of the Local Government Board has been lately drawn to the fact that the number of able-bodied men in workhouses tends to increase. Pauperism as a whole has increased largely of recent years. This has been due partly to bad trade, but partly, also, to the better treatment of the pauper class both in and out of the workhouse, and the recent improvement of affairs in the labour market has not affected—so far as Poor-law statistics go—the very class who ought to have benefited, the able-bodied men. In a parish in Birmingham where the population shows a tendency to decrease, the number of indoor poor continues to increase, and the increase is most marked among the men. This regrettable state of affairs is largely due to want of proper classification. Where young and old, healthy and infirm, are all placed together, common humanity bids those in authority treat the aged with a certain amount of consideration, and the others benefit by the leniency. The long-continued talk about old-age pensions has largely affected the sentiment of Poor-law administration, and Guardians in many cases are inclined to go as far as the law will allow them in making relief as pleasant and non-humiliating as possible; with the old this may be permissible, but unfortunately the young and lazy at present also profit by the kindness shown. Similarly, a period of trade depression which drives people who have hitherto been self-supporting to seek Poor-law relief, softens the hearts of Guardians, and they make the conditions as little disagreeable as possible for this class. But, cruel as it may seem to say so, this is unwise; for having once found that the workhouse is not such a bad place as they had fancied, these people lose the very self-respect which led to their being kindly treated. They degenerate into habitual paupers, ready to go into the house on the least excuse. The only remedy is to make workhouse conditions harder for the able-bodied than for those of the same class outside (and this is what in theory they are supposed by the law to be), while dealing as kindly as may be with the old and infirm, especially with those who can show that they have lived honestly and honourably until old age or sickness came upon them. The recent "strike" at the colony for the unemployed at South Ockendon—due to the fact that the men were expected to work as long as the agricultural labourers into which it is meant to transform them, although they are much better fed than these—shows how far from the disciplinary ideal of the workhouse present-day Poor-law administration has moved, and the result is not difficult to guess. So long as the able-bodied pauper fares better than the independent worker of the same class, so long will our workhouses and so-called labour colonies be filled with men who, though in good health, say they cannot find work.

NURSING ADMINISTRATION.

THE MATRON'S BOOKS.

I.—PROBATIONERS' ENTRANCE ROLL AND PROGRESS BOOKS.

THE importance of keeping a good record of the nursing service throughout the hospital can hardly be overestimated. It is not an easy thing to get a thoroughly good system into working order. Those who, when taking up a fresh appointment, find such a system established through the labours of their predecessors, are unusually fortunate, for there are still many laggards in modern methods of recording concise information, institutions where rough jottings are made to do duty for registers, and where the search for particulars concerning a nurse's career in past years is a process taxing the time and patience of all concerned. Posting the registers is one of the ever recurring duties of the matron, which can never be said to be done. The hospital exists in a state of flux, and at no given time can the matron fold her hands and reflect that she has wound up matters for a week in advance.

Every change which takes place in the disposition of the nurses throughout the hospital is a matter of importance to the nurse or probationer who is moved from one ward to another. Trifling as the variations may appear in her work, taken all together they make up her training, and it is a matter of common justice to each individual that a clear record of all she has done shall be available for reference. The registers which it will be found indispensable to keep are three in number. 1. Entrance Roll for Probationers. 2. Probationers' Register. 3. Sisters' and Nurses' Register.

1. The entrance roll for probationers is a record in concise form of useful particulars regarding the past of all the probationers who enter the service of the hospital, whether they stay three days or ten years. A probationer may come on trial, prove unsatisfactory in every particular and be dismissed, yet from the mere fact of her admission, the hospital is liable to be called upon for an account of her at some future time, when it may be of great importance to be able to produce an entry showing how long the person in question was in the service of the institution, and for what reason she was discharged. The following facts should be obtained:—

Name.
Date of entering.
Date of leaving, or of engagement. (If engaged as regular probationer the folio in book 2 is appended.)

Cause of leaving.
Age. Date. Place of birth.
Single or widow.
Religious denomination.
Educated at.
Previous occupation.
Recommended by 1.
Recommended by 2.
Medical certificate signed by.
Parents living. Father's occupation.
Home address.

Book 2 is the most important of all. The Register of Probationers is likely to be constantly in request,

and the manner in which it is kept has more to do with the general standard of training in the hospital than is often understood. It should be so planned as to give at a glance the whole of the probationer's career in the hospital. If too crowded with detail it misses its aim. If too scanty it may be absolutely misleading. The form in use at the London Hospital and put in evidence before the Select Committee on the Registration of Nurses is admirable. The first part of the page is occupied with a record of the pupil probationer's career at Tredegar House, the preliminary training school belonging to the London hospital. The second part contains the following particulars:—

| Wards where Placed. | Dates. | | Day or Night Duty. | Special Cases. Remarks. |
|---------------------|----------|----------|--------------------|-------------------------|
| | From | To | | |
| Crossman | March 24 | March 28 | Night | Ovariectomy |

The names of the wards of course carry with them the nature of the work, such as surgical, medical, children, etc.

Another good form is that in use at King's College Hospital.

Record of Work During the Three Years' Period of Training.

| Surgical Work. | Days. | | Medical Work. | Days. | | Special Cases. | Illness. Nature of |
|-----------------------------|-------|---------|--------------------|-------|---------|----------------|--------------------|
| | Days. | Nights. | | Days. | Nights. | | |
| Male surgical ... | | | Male medical ... | | | | |
| Female surgical | | | Female medical | | | | |
| Children's surgical | | | Children's medical | | | | |
| Ophthalmic ... | | | Gynaecological | | | | |
| Ear cases | | | Throat | | | | |
| | | | Midwifery | | | | |
| Total ... | | | Total ... | | | | |
| Total of surgical work. | | | | | | | |
| Total of medical work. | | | | | | | |
| Illness. | | | | | | | |
| Off-duty. | | | | | | | |
| Holidays and special leave. | | | | | | | |

This latter form, it will be seen, is compiled at the conclusion of the three years' training from particulars collected from such a daily register as is given above.

At St. George's Hospital the Register of Probationers gives space for a report from each sister in whose ward part of the training has been received, together with the special nursing duties learned in the ward. This is excellent, as it is far easier to appraise the value of a nurse's work and disposition when the report of a succession of superior officers are studied side by side.

EDITOR'S LETTER-BOX.

Our Correspondents are reminded that prolixity is a great bar to publication, and that brevity of style and conciseness of statement greatly facilitate early insertion.]

"ANOTHER MEDICAL REFORMER."

To the Editor of THE HOSPITAL.

SIR,—I am obliged for the copy of your paper sent to me, specially marked for my edification. If you will read it again, you will see that it contains an abominable imputation which amounts to a gross slander and libel of me. It is a pity that your rage prevents you from seeing that you have given away your case and proved mine for me up to the hilt. For this I am grateful to you and bear you no ill will. Avoid personalities; they are vulgar.

I am yours faithfully,

F. W. FORBES ROSS, M.D., F.R.C.S.Eng.

53 Harley Street, July 1.

[We publish this letter as it affords a fair illustration of Dr. Ross's epistolary style and controversial method. And as he is so well satisfied with the substance and effect of our article, it is appropriate he should have an opportunity of recording his gratitude. Our readers will judge for themselves of his qualifications as an authority on the introduction of vulgar personalities into the discussion of a public question.—ED. THE HOSPITAL.]

VOYAGE D'ÉTUDES MÉDICALES.

To the Editor of THE HOSPITAL.

SIR,—May I call the attention of your readers to the facilities for seeing certain of the French health-resorts which are annually offered by the organisation which bears the above title. For the purposes of these visits France is divided into five districts, each of which contains a large number of spas and mineral-water stations. Every year one of these districts is made the object of a carefully arranged inspection. The time chosen is the first fortnight in September. The party, which is strictly limited to 100 persons, travels under the most favourable conditions. A first class special train conveys the members from place to place. The hotel accommodation and the food is provided for in advance. The care and transport of the luggage is undertaken by the organisers in such a way that a member's valise left at the proper hour outside his bedroom at the place of departure, is found inside his bedroom at the next halting-place. The advantages of the particular stations visited are explained at each place by Professor Landouzy, who acts as the president of the company. This year the health-resorts to be visited are those in the district of the Vosges, which include such well-known places as Contrexéville, Vittel, Martigny, Plombières, Luxeuil, and many others. The rendezvous is at Reims on August 31, and the company parts at Divonne, on the lake of Geneva, on September 13. Having now taken part in five of these trips, I can assure your readers that there is no more agreeable or instructive manner of spending a part of one's summer holi-

day. The price (300 francs or £12) is astonishingly low, especially when it is realised that this includes everything from the rendezvous to the dislocation. There are no tips or extras of any kind. Medical men and their wives, and medical students, are allowed to join. Those coming from this country are always sure of a particularly warm welcome.

I shall be happy to supplement this information if any of your readers should desire further particulars on the subject.

Yours faithfully,

LEONARD WILLIAMS.

8 York Street, Portman Square, W.

General Practitioners' Contributions.

Important.

We propose to devote a special page to General Practitioners' Contributions. We therefore invite from practitioners contributions based upon their experience in the management of cases, and in the treatment and diagnosis of disease; especially shall we be prepared to welcome articles dealing, practically, with treatment, and with the use and value of new remedies and methods.

No article should exceed 1,100 words in length, and, if accepted, one guinea will be paid to the writer after publication. Each communication should be accompanied by a stamped directed envelope for the return of the MS. if found unsuitable.

The Relaxations of Medical Men.

We shall also be glad to pay for accepted contributions, from any member of the profession, on the subject of the relaxations of practitioners. This opens up a wide field, as it includes natural history, photography, sport, indoor recreations, and motoring. Whenever possible, original illustrations and photographs should be sent with the MS.

Notices and Answers to Correspondence.

All MSS., letters, books for review, and other matters intended for the Editor, should be addressed to THE EDITOR, The Hospital Building, 28 and 29 Southampton Street, Strand, London, W.C.

Business Notices.

Letters relating to the Publishing, Sale and Advertisement Departments must be addressed to the Manager (not to the Editor):—THE MANAGER, The Hospital Building, 28 and 29 Southampton Street, Strand, London, W.C.

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The Hospital

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SATURDAY, AUGUST 24, 1907.

TEMPERANCE AND LIGHT WINES.

OUR attention has been drawn to two leading articles in the *Temperance Record* criticising our special report on the chemical composition and dietetic value of light wines. We have the greatest respect for and sympathy with the objects of the *Temperance Record*, and the numerous quotations which our contemporary makes from our report are in themselves evidence that we are quite alive to the harm done by the abuse of alcohol. At the same time, since our article was meant primarily for the profession, we did not think it was incumbent upon us to devote space to the admittedly important question, whether from the point of view of the race, the good effects of alcohol were not over-balanced by its harmful ones. Further, it was not our function to inquire whether or not nothing but evil accrues from the use of alcohol, nor whether its prescription should be entirely abandoned by the medical profession. Indeed, our object was primarily not alcohol at all, but wine, and essentially to see how different wines affected the different digestive processes, and from this to infer their doses and some of their uses and abuses. We thought, when initiating this report, that one must be scientific before one is ethical, and that at any rate, dealing as we do with the medical profession, our first function was to endeavour to find out to the best of our power the truth, and, having found it, to tell it as simply as possibly without any pro-alcoholic or anti-alcoholic garnishing.

Having dealt briefly with what was roughly our object, we will deal *seriatim* with the criticisms. The first serious criticism is one based upon our remark that one can only get sufficient alcohol from wine to produce its full action of making one drunk by taking sufficient extract to make one ill. If the Editor had read the context he would have found that this was, so to speak, the culminating remark of a comparison between the action of spirits and wine, the former being an almost pure alcoholic beverage and giving the toxic effect of pure alcoholism, the latter containing a relatively large amount of extract. The extractives of wine do disagree with many patients, and this is well known, and is the reason why whisky and other spirits are so

frequently resorted to. Our point, roughly, was this, that from the point of view of the action of the alcohol, wine contained a protective mechanism in the shape of by-products, and if dipsomaniacs took wine as their intoxicating drink, they would not take so much alcohol as if they took spirits, because the extract in wine would make them ill before they got what to them—namely, the drunkard—was the full effect of the alcohol.

The next criticism concerns the eternal question as to whether alcohol is or is not a food. As a matter of fact, we do not regard this question of much importance. We never say, as we are represented to do, that a food "merely produces energy by simple oxidation." We do not know what "simple" oxidation is: perhaps the Editor will tell us. Matters scientific are not always quite so simple as they appear. The Editor informs us that in order for a food to be a food, it must build up the tissues; if this means anything scientifically, it means it must contain nitrogen; therefore neither sugar nor fat are foods. Alcohol, in suitable doses, and sugar, are forms of energy, and bear the same relation to beef steak as a crossed cheque does to a sovereign; the body, like the spender, can get at the real value of the latter easier than at that of the former. We quite agree with our contemporary that wine is taken in the main because it is pleasurable, and that only too often not sufficient thought is given to what this pleasure may cost. That is precisely why we undertook our inquiry, and endeavoured, as far as was possible under the conditions set, not only to indicate the differences between different kinds of wine, but also approximately their doses.

The next remark of our contemporary is again, we are afraid, due to a regrettable neglect to read the article criticised. We are upbraided for calling a certain Australian wine containing 16.19 per cent. of alcohol a light wine; in two places in the article we expressly say that this wine, and, indeed, this class of wine, are in no sense comparable to French clarets, and cannot be called light wines. We are taking all the criticisms of our contemporary most seriously, as we should be exceedingly sorry if any

inference of ours should in any way militate against the cause of temperance, which we have every desire to assist.

The *Temperance Record* criticises severely our statement that light wines are essentially temperance beverages. We admit at once that that statement was relative, and loses some of its significance when lifted bodily out of its context. When we made the statement we were comparing wines with spirits, and we obviously referred to wines as recommended to be used by the report. We are, however, prepared to defend the statement upon absolute grounds. We assume that the editor admits, with the excise authorities, that a beverage, for instance, like ginger beer, which may and often does contain 2 per cent. of alcohol, is a non-alcoholic beverage. The report recommends the use of about 20-25cc. of alcohol contained in 200 or 250cc. of light wine at meal times, diluted with an equal quantity of water; in other words, it recommends the use of a 5 per cent. solution of alcohol, or a beverage containing rather more than twice the alcohol contained in ginger beer. We do not think that the term "essentially a temperance beverage" is very inappropriate to such a drink. Leaving the question of tannin, which is far more important in regard to tea-drinking than to wine-drinking, we come to the last essential criticism, namely, the charge made against us that the experiments were only made in test tubes, and that we made no controls. We quite admit that the experiments were made in test-tubes,

and this to the lay mind is a very ear-catching criticism. Since, however, practically all our knowledge of the chemistry of digestion, which has subsequently been confirmed by clinical observation, is derived from experiments made in test-tubes, or, at any rate, glass vessels, we make no apology for the technique. The results of these experiments are as clear and traducible as any other class of chemico-physiological experiment. With regard to the question of controls, we must again charge our contemporary with careless reading. We have made and published controls made with simple alcohol and also water. The control with the CO₂ and by-products of champagne we did not make because it would be quite impossible to do so; further, there was no necessity for making it. If we know by control, which we do, that the alcohol in the strength in which it would be present in the champagne digestive mixture would not produce the effect the champagne produced, it is reasonable to infer that the stimulated digestion of proteids produced by the champagne was, at any rate, partly due, which is all we say, to the non-alcoholic constituents of the wine.

As we have said above, we have considered the article in the *Temperance Record* carefully because we believe in, and wish to aid, by ascertaining and emphasizing truth, the cause of temperance, but we fear that irresponsible criticism, based upon inaccurate perusal of the work criticised, will bring any cause, however praiseworthy, into disrepute.

SCHOOL ATTENDANCE AND PUBLIC HEALTH.

LONG ago there was an outcry against the grants to State-supported schools being made dependent upon the children passing certain examinations, because it was felt that this method tended to over-pressure and consequent injury to the children. In deference to this cry, the grant was made to depend upon the average attendance. But the result of this has been, as was recently pointed out by Dr. Conolly, medical officer of health of Wood Green, that teachers press children to come to school even when they are not in a fit state of health. There is a general notion among those who have to do with education that a high average attendance is a proof of efficiency on the part of the teachers. That irregular attendance means imperfect education may be granted, but that is no reason for keeping up the average attendance by insisting on the presence of sickly children, who may be in the incubation period of infectious diseases, and are in any case unlikely to benefit by what they are taught.

Another effect of the pecuniary importance of a high average attendance is that when the ap-

pearance of an epidemic keeps a considerable number of children away from school, the teachers press for the closing of the entire school. Partly, no doubt, this is due to the fear of infection spreading through the school; though as the pupils who are thus set free play for the most part in the streets in company with school-fellows, many of whom are either sickening for the disease or convalescent from it, it may be doubted if the preventive value of the closing is great. But also, the teachers prefer to show a smaller number of sessions with a large average attendance at each, than a greater number with a lower average, because the amount of the grant is reckoned on the actual sessions and average attendances. Thus this method of settling the grant is not more favourable to education than the old way, nor more beneficial to public health. The ideal method of fixing what a school has earned from the Government is doubtless difficult to find, but at least it is desirable that teachers should not be made to feel that the securing of a high average attendance is an important feature of their work.

ANNOTATIONS.

The Chloroform Controversy.

THE recent discussion on "Anæsthetics" at the British Association has elicited from Lieut.-Col. Lawrie an interesting statement on the historical aspect of the chloroform controversy. In a letter to the *Times*, Col. Lawrie defines the position of the "old Edinburgh school," and quotes the directions which Syme used to give for successful chloroform administration. He states that Syme never had a death from chloroform, and that those who follow his principles have given chloroform "all over the world with the same safety and success that he had." Syme's directions may be summarised as follows. A free admixture of air with the vapour of chloroform, which is ensured by administration from some such material as a folded towel or handkerchief; if this is attended to, the more rapidly the anæsthetic is given the better until the effect is produced; guidance is obtained not from the pulse, but by watching the respiration; no apparatus is used, and administration should never be continued beyond the point where the patient is fully under the influence of the anæsthetic. It was in 1889, and at Col. Lawrie's suggestion, that the Nizam of Haidarabad appointed the celebrated Haidarabad Commission, and this, it is contended, "proved conclusively and finally that chloroform, when given by inhalation, does not affect the heart directly," and established the truth of Syme's principles "upon an absolutely definite scientific basis." This, Col. Lawrie maintains, is a plain statement of an established fact, which can be demonstrated in any laboratory or operating-theatre as a proof that, when chloroform is given on the above principles, "danger and death are alike impossible." If physiologists continue to regard chloroform as a dangerous drug, this merely shows that the work of the Haidarabad Commission has been neglected. The interesting question, however, is, that, assuming all these contentions to be accurate, why have Syme's teaching and method not commanded universal adoption?

The Medicinal Treatment of Cancer.

NOT the least interesting part of the Cancer Research Report is that which deals with the subject of treatment. The findings of the investigators are interesting, but at the same time they are terribly disappointing, because the record which they furnish is entirely negative. The claim that trypsin, either alone or in conjunction with amylopsin, had cured two mice inoculated with portions of Jensen's tumour was tested by a series of experiments, and after a very careful study of results the verdict is that the alleged remedy was found to be useless. This judgment on a method of treatment which, with all its limitations, appeared at least to offer a more hopeful chance of success than any other method of medicinal treatment is, of course, disheartening, but disappointing though the facts are, they will have to be faced. The treatment of cancer by pancreatic ferments has had a careful and unprejudiced trial, and has been found useless. It must, however, be asked whether the facts elicited by this

inquiry mean a complete abandonment of the use of medicinal agents in the treatment of the disease. As a substitute for early and effective operation, such agents, it must be admitted, have at present no field of usefulness. But in inoperable cases there is surely reason to continue careful observation and experiment. The situation in such cases cannot be worse, and in a certain number of instances there is reason to believe that it may be alleviated. In some quarters unwarranted "booms" have obviously been cultivated, but there are certain careful and conscientious men who have already gained some encouragement, and we sincerely trust that they will continue their work.

Medical Sickness and Accident Assurance.

IT is a frequent taunt that members of the medical profession are not men of affairs, and that they often fail to arrange both their corporate aims and their personal interests on a sound business basis. In all this it must be admitted there is some measure of truth, and when the circumstances of professional training are considered the absence of the sound commercial instinct is not altogether a matter for wonder. Failure in this respect is occasionally illustrated in pathetic fashion when a practitioner's health breaks down and it is found that he has made no provision to meet any such misfortune. To him and to those dependent on him the consequences of such a position are apt to be disastrous. Medical practice is so largely, often indeed entirely, a personal matter, that a practitioner's ill-health or sickness means an absolute cessation of income. Hence there is no class on whose members it is more incumbent to avail themselves of every opportunity to secure provision against failure of health than the medical profession. To do this by personal effort and economy is often impossible, more especially in the earlier years of life, and hence it is wise to consider what may be effected by the principles of co-operation and mutual insurance. In this connection we venture to direct the attention of our readers to the Medical Sickness and Accident Assurance Society, the offices of which are at 33 Chancery Lane, W.C. The Society has been in existence since 1884, and the membership, which is entirely confined to the medical and dental professions, has grown from 200 to 2,488. A sum of more than £100,000 has been paid in response to claims from policy-holders. A policy will secure a payment of four guineas a week during professional disablement, and in cases of permanent incapacity half this sum will be continued to the age of 65 years. No payments are made for commissions and no agents are employed, and in the course of some 20 years over £12,000 has been returned in the shape of cash bonuses to members. The chairman of the Society is Dr. de Havilland Hall, and the trustees include Sir Dyce Duckworth, Sir Victor Horsley, Dr. Heron, and Dr. Dawson Williams. Here, as in so many other directions, united action by the profession would secure both a more powerful institution and increased personal benefits to individuals. We are glad to have the opportunity of commending this valuable professional organisation to the attention of our readers.

MEDICAL OPINION AND MOVEMENT.

On the Continent there is a very general fear of the evils which may result from the use of ordinary water for drinking purposes. In consequence there is an enormous consumption of so-called "table waters," aerated or otherwise. People are ready to pay for what they could otherwise obtain free, in the sublime belief that they are securing a drinking water free from any germs of disease or other impurity. Anyone who reads the report of M. Bruhat on his analysis of a large number of table waters, including all those most in vogue, will suffer a rude awakening. He finds that the majority of these waters fall far below the standard of purity which may reasonably be expected of them, and that ordinary water which the public rejects as suspicious contains fewer micro-organisms than these table waters, sold at relatively high prices, and consumed by the public on account of their faith in the purity of them. M. Bruhat was so surprised at his own findings that he repeated his analysis on a larger scale. He suggests as remedies that the public should be made aware of the actual condition of things, and that the authorities should exercise a more rigorous control over the industry.

FLUSHING the system with large quantities of fluid is now regarded as an important factor in the treatment of conditions of general peritonitis. Dr. Murphy, of Chicago, and Dr. Le Conte, of Philadelphia, attribute their success in the treatment of these conditions largely to their method of injecting large quantities of fluid into the rectum. Mr. B. G. A. Moynihan, of Leeds, following their method, is equally impressed with the efficacy of the treatment. Using the method in 19 consecutive cases of general peritonitis due to appendicitis, he has had only two deaths, and he believes the recovery in many cases due to the continuous administration by the rectum of saline solution over a period of two to four days after operation. In a recent paper he gives the details of technique, by which a continual flow may be secured. The rectal tube he uses is similar to the ordinary vaginal flushing tube with several apertures, and this communicates by rubber tubing with a supply flask arranged on the "wash-bottle" principle to give a continuous flow. It is provided with a thermometer, and the temperature of the saline is kept at about 100° F. by immersion in a bath of hot water provided with a spirit lamp. It is, of course, necessary that there should be an intelligent nurse in constant attendance. The flow should be at the rate of about 1 pint per hour, and as much as 16 pints may be given in the course of 24 hours. The effect upon the patient Mr. Moynihan describes as remarkable. Instead of the sunken features, parched mouth and clammy skin, the patient soon begins to exhibit a clean and ruddy skin, bright eyes, a moist tongue, and an aspect of comfort and contentment.

THE London School of Medicine for Women is to be congratulated on the successful stand it has made in conjunction with the British Medical Association in support of the principle that there should be no

difference in the rate of remuneration for official appointments for the two sexes. In several cases attempts have been made by Boards of Guardians to effect an economy by advertising for female medical officers at a lower salary than has been given to their male predecessors. The recent dispute at Halifax was a case in point. The Halifax Board of Guardians advertised for a resident lady medical officer at the Halifax Union Hospital at a salary of £100 per annum. Previously the appointment had been held by a male doctor at £140. The services of a lady doctor having been obtained at the reduced salary, the matter was taken up by the London School of Medicine for Women and the local division of the British Medical Association, and the lady appointed resigned the post before entering upon her duties. A second lady doctor, who accepted the appointment in ignorance of the dispute, also resigned on being made aware of the facts of the case. As a result of this firm attitude assumed by the profession, the Board of Guardians has sought to effect a compromise, and the dispute has been amicably settled. It is most important that in such cases women should steadfastly refuse to undersell their medical brethren, and should maintain the principle that there should be no difference in remuneration on the ground of sex. By so doing they will not only serve their own interests, but also those of the profession at large.

THE tuberculin reaction as a means of diagnosis is already well recognised. It has been shown recently that instead of injecting the tuberculin hypodermically, a local reaction may be obtained by introducing it into a small scarified area of skin. In 48 hours the area becomes red and oedematous, and frequently a sort of papule appears, which dries up and disappears again in the course of a week. Wolff has obtained a similar reaction by introducing tuberculin into the eyes of bovines. Following these results M. Calmette has carried out a series of experiments on the human subject. He has treated 25 individuals, of whom 16 were tuberculous and nine affected with other diseases not tuberculous. He instilled one drop of a 1 per cent. aqueous solution of tuberculin into the eye of each patient. In the case of all the tuberculous patients the palpebral conjunctiva showed congestion and oedema 3 to 5 hours afterwards, with a fibrinous secretion and lachrymation. These signs subsided in the course of 24 to 36 hours, and caused only slight inconvenience, but no pain. In the other cases at the most only a slight redness appeared 2 or 3 hours afterwards, which rapidly disappeared. M. Calmette designates this the "ophthalmo-reaction to tuberculin." If further investigation proves it to be as harmless and as certain a diagnostic sign as these experiments suggest, it may prove of value to the clinician. The profession on this side shows, however, less temerity in adopting methods of diagnosis or treatment of uncertain value, and further confirmation will doubtless be awaited before medical men will ask their patients to submit to an instillation of tuberculin into their eyes.

HOSPITAL CLINICS.

THE SURGICAL TREATMENT OF DUODENAL ULCER.

By LEONARD A. BIDWELL, F.R.C.S.Eng., Dean of the Post-Graduate College, and Surgeon to the West London Hospital.

SYMPTOMS AND DIAGNOSIS.

THE first point to consider in duodenal ulcer is the diagnosis, but although considerable attention has been paid to this subject during the past few years, it is still far from simple. Duodenal ulcer is more common in man than is gastric ulcer; and it is more common in man than in woman. Duodenal ulcer is more common in middle age than in youth, whereas gastric ulcer is common in the young.

Vomiting is very rarely present in the early stages of duodenal ulcer; it occurs in the late stages, when cicatricial contraction exists. In gastric ulcer vomiting is one of the first symptoms. The symptom which induces a patient with a duodenal ulcer to seek advice is pain, and pain is often the only symptom which will be apparent until a late stage of the case; it is of a dull aching character, and occurs some time after food, usually from one to four hours. The pain steadily gets worse; it comes on a shorter time after food and lasts longer. At first it is relieved by taking food. Another curious symptom of duodenal ulcer is "hunger pain." It is a sort of irresistible desire for food, a violent feeling of hunger. Immediately food is taken the pain is diminished, to come on again shortly. This is very seldom found in gastric ulcer. Nausea and water brash are common, though vomiting is rare. In about half of the cases which I have seen, there has been a history of hæmorrhage, either in the form of hæmatemesis or of melæna. When hæmatemesis occurs the amount of bleeding is not very profuse, but in melæna the bleeding is sometimes very copious indeed, and so severe that the patient suddenly becomes faint and pale; while on the following day a copious motion of digested blood is passed per rectum. We have to remember also that a great number, nearly a quarter, of cases of duodenal ulcer are associated with gastric ulcer; difficulties in diagnosis arise from this cause.

ILLUSTRATIVE CASES.

The best way to illustrate the symptoms of duodenal ulcer will be to describe some of the cases which I have seen in consultation with physicians. The first case was that of a man, fifty-five years of age, who had suffered from flatulent dyspepsia for seventeen years. About two years before I saw him he began to get anæmic and to lose strength. He was treated for pernicious anæmia. Some blood was found in the stools, but that did not make his physicians suspect duodenal ulcer. He remained much the same for eighteen months, when he had a very severe hæmatemesis, and the question of gastric ulcer was discussed. There was no hunger pain nor pain after food. Ten days before my visit, he suddenly became pulseless and collapsed and

passed a copious black motion next day. He was put on rectal feeding, given nothing by the mouth, but eight days later a similar hæmorrhage occurred after a dose of castor oil. When I saw him he was sallow and emaciated with a retracted abdomen and a very soft pulse, and he complained of some tenderness on pressure in the middle line, just above the umbilicus. In this case we could not assist diagnosis by passing a stomach-tube, on account of the risk of setting up fresh bleeding. The condition was exceedingly serious, and I advised a delay of four days before opening the abdomen. The operation was performed four days after the second hæmorrhage, a considerable amount of induration was found in the second part of the duodenum, and an ulcer which extended three-quarters round the gut; a posterior gastrò-enterostomy was performed. This case did not have many of the usual symptoms of duodenal ulcer; practically the only symptom was hæmorrhage.

The second case was a gentleman, aged forty-five, who had suffered from attacks of hyperchlorhydria for about twenty years. These attacks of excessive acidity of the gastric juice caused a certain amount of pain and were followed by water brash. He had an intense craving for food and curious nerve pains, with a terrible feeling of misfortune hanging over him. He became so neurasthenic that he had to give up his business in the city. Six months before I saw him the attacks of vomiting became more severe, and the vomit contained a large amount of free hydrochloric acid. Lavage had been tried with benefit, but the Weir-Mitchell treatment produced no good effect. This patient had neither melæna nor hæmatemesis. The stomach was slightly dilated, but did not extend below the umbilicus. A stomach tube was passed and some contents withdrawn; the stomach was then blown up with air through a Higginson's syringe, and I was able to define the lower border of the stomach. This method of distending the stomach is preferable to the method of giving a seidlitz powder in two parts as in the latter method a large amount of carbonic acid gas is generated, which produces spasm of the pylorus, and prevents the gas from escaping onwards and so causes pain. With a stomach tube the stomach can be distended as much as is required, and air does not produce any spasm. The only objection to the method is that a stomach tube has to be passed. To return to the history of this patient. He had intervals of complete freedom from pain, and he was then able to enjoy himself and felt perfectly well; but these intervals gradually became shorter. On these symptoms the physicians recommended exploration as a last resource. The reason why they suspected duodenal ulcer was that he had very marked hunger pain and a very considerable degree of hydrochlorhydria. I opened the abdomen and found an indurated ulcer in the second part of the

duodenum, and performed posterior gastro-enterostomy.

TWO OTHER CASES.

The next case is one in which I think the symptoms are very characteristic. A lady, aged forty-three years, had suffered from pain after food for seven or eight years; vomiting was very occasional, and there had never been any hæmatemesis. The pain came on usually two hours after food—sometimes earlier—and was relieved by taking food. She suffered from flatulence and became emaciated. She was never free from pain for more than two days. The stomach was blown up and found to be dilated and extended below the umbilicus. At the operation a large indurated ulcer was found on the posterior surface of the first part of the duodenum, and, being close to the pylorus, it had produced a cicatricial stricture, and thus had caused dilatation of the stomach.

The last case was a man, aged fifty-five, who gave a history of pain after food for seven months, but no sickness or nausea until a week before I saw him, when he started "coffee ground" vomiting. He vomited everything he took, so that he was afraid to take even liquid food. The stomach was dilated and extended one inch below the umbilicus. The age of the patient and the history of seven months' pain after food, followed by vomiting of "coffee-ground" material, made one fear that it was a case of malignant disease. An examination of the stomach-contents showed that free hydrochloric acid was present, so the prognosis was hopeful. At the operation an ulcer was found in the usual place in the duodenum, and complete relief was afforded by a gastro-enterostomy.

These cases will serve to illustrate the symptoms. In all of them we found the condition of hyperchlorhydria. This is demonstrated if the contents of the stomach are tested with a solution of phloroglucin and vanillin. Put a drop of the solution and a drop of the stomach contents on a white plate and allow the two drops to coalesce, and heat over a spirit lamp; if hydrochloric acid is present a pink colour is produced, the depth depending upon the amount of acid present. If none is present a brown colour is obtained. This test will often prevent the mistake of diagnosing a simple duodenal ulcer as malignant disease. Fortunately, malignant disease is rare in the duodenum, although common in the stomach as the result of gastric ulcer. If the ulcer is in the duodenum it is most probably not malignant.

INDICATIONS FOR OPERATIONS.

In former days the advanced surgeon used to recommend operations in duodenal ulcer only after rupture, repeated hæmorrhages, or cicatricial contraction. I have quoted to you examples of operation for repeated hæmorrhages and for cicatricial contraction. In the case of rupture there can be no question as to the necessity for operation. In cases of rupture of a duodenal ulcer the previous history may be very indefinite, because rupture often takes place early in the history of the ulcer, before it has produced hæmorrhage or cicatricial contraction—

before, in fact, it has produced any symptoms except pain and flatulence. The symptoms of rupture of a duodenal ulcer are very acute, since most cases lead to general peritonitis and extravasation of duodenal contents into the abdomen. About three months ago a woman thirty years of age was admitted into hospital, complaining of acute pain in the abdomen, which had come on suddenly after indefinite indigestion of some standing. This acute pain came on about five o'clock in the morning. She saw a doctor, who did not think that it would be serious, and gave her a little opium, which made her more comfortable. In the evening she had a great deal more pain, the abdomen became rigid, and she was sent to the hospital. The abdomen was slightly distended, with marked rigidity of the upper half of the right rectus muscle—a very important sign of rupture of a duodenal ulcer. Practically there are only two conditions which will produce that marked rigidity of the right rectus—namely, rupture of a duodenal ulcer and an inflamed gall-bladder or duct. In this case the acuteness of the onset and the existence of some dullness in the flanks were important as pointing to duodenal ulcer rather than gall-stone trouble. She had also a rapid pulse of about 130, and a temperature raised slightly above normal. When the abdomen was opened an ulcer was found in the second part of the duodenum. It had ruptured, and the duodenal contents had escaped freely into the general peritoneal cavity.

SUTURES AND DRAINAGE.

In order to close the rupture we put in a double row of Halsted's stitches a quarter of an inch from the edge of the ulcer. In bringing the edges of a ruptured ulcer together it is important to ensure that the scar is in the transverse and not in the vertical diameter of the bowel. It is essential to thoroughly clean away the extravasated duodenal contents, specially between the liver and the diaphragm and between the spleen and the diaphragm. These spaces must be thoroughly swabbed out with sterilised mops, and a counter-opening must be made posteriorly, below the ribs, on each side.

A stab puncture is made through the skin close to the erector spinæ muscle, and then a pair of strong pedicle forceps are pushed through from the outside; they enter the abdomen internal to the ascending colon, of course avoiding the kidney. After pushing the forceps through the stab puncture in the loin, the point is made to present in the abdominal wound, and a drainage tube is caught by the blades and drawn out through the loin, leaving its end projecting about half an inch from the parietal peritoneum. If there has been much extravasation, the pelvis must also be drained by making an incision just above the pubes and passing the tube down from the abdomen to the pelvis. After the drainage tubes have been inserted the abdomen may be washed out with saline solution. Never on any account use anything but this. Washing out the abdomen even with plain water or before the drainage tubes have been put in may do harm. Plain water injures the sensitive

cells of the peritoneum, and if you wash out before the drainage tubes are in you are liable to wash the irritating material into the remoter recesses of the peritoneum. You must be certain that you have a free escape for any fluid before you attempt to wash. If a ruptured ulcer is treated on these lines, by closing the ulcer and providing free drainage, and provided that it is done within twelve hours of the rupture, the result should be satisfactory. It is now the rule rather than the exception for the cases to recover, mostly due, I believe, to the method of drainage and to the avoidance of antiseptics or plain water. Antiseptics were commonly employed in former days, and their use was almost certainly fatal.

With the old indications for operations all will agree—namely, rupture, hæmorrhage, and cicatricial contraction—but we go much farther nowadays, and recommend operation in all cases of duodenal ulcer in which the diagnosis can be made out. Medical treatment is practically useless in the treatment of duodenal ulcer, since whether food is taken or not the ulcer must always be irritated by the acid gastric juice passing over it.

THE SITE OF ULCERATION.

It is interesting to notice that the position of the ulcer is nearly always just above the inlet of the bile duct, and so it occurs in a portion of intestinal mucous membrane which is bathed in gastric juice before that fluid meets with and is neutralised by bile. I have never come across a duodenal ulcer which has started below the bile duct; it is either opposite to or above it. The probable explanation of the relief of pain in the case of duodenal ulcer after taking food is that immediately after food is taken the pylorus contracts, and remains contracted till the first stage of digestion is over, and thus prevents the gastric juice from leaving the stomach and irritating the ulcer. When the pylorus opens at the end of that stage of digestion the gastric juice and food pass over the ulcer, and then pain commences. The "hunger pain" seems to be caused simply by an irritation of the ulcer by gastric juice.

HÆMORRHAGE.

Considering the position of the ulcer, it is natural that hæmorrhage should take a downward course and appear as *melæna*. Those cases in which it occurs as hæmatemesis are cases in which the bleeding occurs at the time when the stomach is empty and the pylorus dilated. As soon as the food comes into the stomach the pylorus becomes closed, so that if the bleeding occurs after food *melæna* is more likely than hæmatemesis. If it occurs during fasting, hæmatemesis will be probable, and not *melæna*. A duodenal ulcer which does not perforate may heal up, and in so doing may cause cicatricial contraction. When this occurs the stomach becomes dilated, and persistent vomiting is an important sign. Sometimes one sees hypertrophy of the stomach very much like that of the bladder in a case of stricture of the urethra. I have operated upon cases of duodenal ulcer in which the stomach walls have been greatly thickened, but in which there was very little dilatation of the stomach.

When dilatation is fully established an important sign is the vomiting of an apparently larger quantity of food than has been taken. Some of the vomited matter will probably be undigested portions of food which have been taken two or three days, or even months, before. The most extreme case was one quoted by Moynihan of a person who had eaten plums in the August of one year and in whose stomach plum stones were found in May of the following year. On washing out the stomach, therefore, you may find evidence of this stasis of food, and it is quite common in dilatation to find foodstuff which has remained in the stomach for a fortnight.

THE OPERATION.

The operation usually performed is that of gastro-enterostomy, except in cases of a perforated ulcer, when closure of the perforation has to be performed also. By gastro-enterostomy the gastric contents are prevented from passing over the ulcer, and in nearly every case it is a satisfactory method of treatment. The point aimed at is drainage of the most dependent portion of the stomach. In a dilated stomach the pylorus is displaced, and is no longer the lowest part of the stomach. The pyloric antrum when distended is on a lower level than the pylorus. In cases where there is no pyloric obstruction, it is necessary to prevent the gastric contents from reaching the pylorus, and to do this it is essential to make the opening at the lowest part of the stomach. The opening must be made in a certain direction—namely, downwards and to the right—so that the waves of the contraction in the piece of jejunum applied to the stomach shall be in the same direction as the waves of peristaltic contraction in the stomach. The opening should be made in the direction of these movements, so that the food, on entering the jejunum, will be passed on towards the ileum. The opening in the jejunum should be made as close as possible to its commencement, close to the ligament of Treitz. This is more or less a new idea.

In the old days it was considered better to leave a loop of jejunum before attaching it to the stomach, with the idea of relieving the strain upon the stitches. This method was apt to be followed by vomiting, due to the formation of a vicious circle. In my earlier cases I have had experience of this condition, but not recently. The vicious circle was cured immediately by entero-enterostomy.

RESULTS OF OPERATION.

I have now operated on a considerable number of cases of duodenal ulcer, and I have not lost any cases except after perforation, and the immediate results have been excellent. The great majority of cases are permanently cured by the operation.

One warning which I give patients now is that for a few months after a gastro-enterostomy they may not be free from discomfort and indigestion. It takes that time for the stomach to settle down to its new conditions. The recurrence of pain is transitory and passes off. The condition of the patient a year after the operation is the important thing, and that, as a rule, is absolutely satisfactory.

OBSERVATIONS ON INTRA-CRANIAL TUBERCULOSIS IN CHILDHOOD.

By WILLIAM P. S. BRANSON, M.D., M.R.C.P., Assistant Physician, East London Hospital for Children.

INTRA-CRANIAL tuberculosis is always secondary to an infected focus elsewhere, and during childhood supplies the closing scene in a majority of tuberculous deaths. Therefore every tuberculous lesion, however insignificant intrinsically, is a potential danger to life, especially in the early years of childhood, when caseation and subsequent dissemination of the tubercle bacillus are such common incidents of tuberculosis.

There are three main classes of lesion, each of which has for a time a more or less distinct clinical representation, though all merge into a common type towards the end of life. These are:—

1. Miliary meningeal tuberculosis,
2. Caseating meningitis,
3. Caseous tumour of the brain.

1. MILIARY MENINGEAL TUBERCULOSIS.

This is the common form. It is marked by thickening and adhesion of the membranes about the base and by small tubercles in varying abundance. The vertex is often free from macroscopic tubercles after death, but there is no rule except that the base is the region principally involved. I have made some inquiries into the seat of the primary infection in these cases, confining attention to those patients who were believed to be free from tuberculous lesions at the time of the appearance of the meningeal symptoms. This appears to be almost invariably a gland; the bronchial lymphatic glands, being caseous in about 50 per cent. of instances, are the chief offenders. In about 20 per cent. the mesenteric glands appear to be responsible.

THE SYMPTOMS.

These are best studied in cases where the meningeal affection is clinically primary—cases, that is to say, where the original focus is latent in the lymphatic glands, as above described—for in them the symptoms are not veiled by those of disease elsewhere. The cardinal symptoms of onset in such patients as these are, in order of frequency, vomiting, convulsions, and headache. Vomiting is essentially an early symptom, and is often very frequently repeated during the first week. At or about this time it ceases and generally plays no part in the later stages of the malady; but there may be no vomiting throughout. Convulsions may assume all forms, from a limited Jacksonian seizure without loss of consciousness, to a long-continued generalised fit. These motor invasions may pass away, leaving no trace of illness behind, and thus constantly imperil the diagnosis. Headache is probably more constant than records appear to show, for it is liable to be overlooked in young children. It is often very severe and subject to paroxysmal reinforcement, which seems to determine the shrill "meningeal cry."

In addition to these three cardinal symptoms there are two others as constant but less dramatic. These are irritable drowsiness and constipation. The former is common at the invasion of any acute

illness in childhood, but is generally associated with a considerable rise of temperature. When it appears apart from high fever it is an ominous symptom. Constipation is almost constant during the invasion of tuberculous meningitis.

The medullary irritation which may be presumed to account for the early vomiting may, and generally does, affect to a varying extent the cardio-inhibitory, the respiratory, and the vasomotor centres. In consequence it is common to meet with irregularities of the pulse and respiration, together with the *tâche cérébrale*. Of these the two first are of serious moment, but the last has no specific significance. Yet another important symptom is an unnatural flaccidity of the abdomen, which is frequently to be observed in the early stages of the disease. It is not easy to explain the mechanism of this symptom, which is a very common one. Photophobia is common, but examination of the fundus is of less diagnostic service than is commonly reported. For although both optic neuritis and choroidal tubercles are to be met with tolerably often, they do not as a rule appear early enough to assist the diagnosis. Kernig's sign occurs in so many conditions as to be almost valueless.

The duration of life after the onset of symptoms varied in a series of thirty-seven cases investigated from three to twenty-six days.

THE DIAGNOSIS.

It is well known that the diagnosis of tuberculous meningitis is full of pitfalls, particularly because it often attacks children apparently in the best of health. The points for insistence are that the age of election for apparently primary tuberculous meningitis is the second year of life, and that the disease becomes progressively less frequent in after years; also that the most common error lies in attributing the vomiting of onset to simple "biliousness"—that is to some purely gastric cause. It is not too much to say that the appearance in a child under five years old of any one of the above-mentioned symptoms should bring the possibility of tuberculous meningitis to mind. It should be remembered, further, that, with the exception of rare cases of unaccountable vomiting, all the diseases commonly confounded with tuberculous meningitis present either a considerable degree of fever, or a leucocytosis, or both, whereas the fever of tuberculous meningitis is trifling and leucocytosis absent at least in the early stages.

PROGNOSIS AND TREATMENT.

The fact that a few cases of recovery from what appears to have been miliary meningeal tuberculosis are to be found in the literature does not appreciably vitiate the general dogma that the disease is a mortal one. But it justifies the assumption that there is a bare chance of recovery which should never be denied to the parents of the victim. In view of the sad facts of its pathology and probable

issue, it is hard to approach the treatment of this disease with any enthusiasm, but there is a definite opening for therapeutics in the relief of symptoms. This is particularly true of the headache which attends the early stages. I have no doubt that both phenacetin and antipyrin are of definite service here. Further, it is good practice to shave the head and advise the constant application of ice, for the proceeding may give some relief, and at the worst

supplies an active outlet for maternal solicitude, which is not without its value in such gloomy circumstances. If these means do not affect relief of the pain, opium or morphine should certainly be given. Convulsions in the early stages should be met by chloroform inhalations, but the clonic twitchings which attend the close of the disease are past all useful interference.

(To be concluded.)

MIGRAINE.

Being an Abstract of a Lecture thereon by PURVES STEWART, M.A., M.D. Edin.,
F.R.C.P. London.

THE aura in migraine is a subjective sensation of some kind, and the commonest is the visual. It is generally hemianopic in its distribution, occupying and confined to one half of the visual field. The visual phenomena are generally on the side opposite to the headache. The patient begins to notice a sort of blurring of his vision, which may increase to actual blindness, so that he sees nothing on that side; or he may have subjective colour sensations such as a luminous spectrum or a very fine zigzag fluctuating pattern, enclosing a blind area, which soon increases in size and spreads out over half the visual field. In rare cases the upper half of the field of vision is lost, or there may be a central scotoma.

THE AURA.

Among the other common auræ is a tingling sensation spreading up one hand or one arm to the face, lips, mouth, or tongue. That is fairly common, and is followed by pain on the other side of the head. If this tingling sensation is on the right side of the body and spreads to the face, it may be accompanied by a slight degree of aphasia.

An eminent "migrainist" lecturer of my acquaintance knows he is going to have an attack when he is lecturing because he begins to use the wrong words. He thereupon promptly stops his lecture and makes preparations for the attack. The tingling arm is clumsy and weak. If the tingling is in the tongue it may be difficult for the patient to articulate his words. We have therefore to diagnose cases of migraine from epilepsy, especially Jacksonian epilepsy. There may be auræ of smell or taste, and rarely of hearing, just as in the epileptic fit.

LATER SYMPTOMS—HEADACHE.

After the aura comes the headache and its associated phenomena. The headache is generally one-sided, either exclusively or preponderatingly. The site of maximum pain is generally over the eye, and from that fact the old English name "brow ague" is given.

The patient is abnormally sensitive to stimuli such as loud sounds and bright light, and, if left to himself, goes to the quietest room in the house and pulls down the blinds.

Some people during an attack of headache have

flushed features, others have pallor; some start with pallor, and finish with flushing. Some do not change colour at all. The pupil on the affected side is sometimes contracted, sometimes dilated, and sometimes unchanged, and its condition is of no real diagnostic value. The patient has a violent distaste for food. As the headache continues, he develops nausea, and this nausea culminates in vomiting, and the patient then knows that the end is in sight. The vomited material consists largely of mucus or of bile. That is why this is called a "bilious" headache, though the attack has nothing to do with the liver. After vomiting, the headache generally comes to an end, the patient falls asleep, and wakes up quite well. In some cases the vomiting may be replaced by a critical diarrhoea, sweating, or lachrymation.

In a moderately severe case the headache lasts about twelve hours. In other cases it may be prolonged for days, or for a week—a most distressing and fortunately rare condition called the *status hemicranicus*. Sometimes the patient is partially aphasic the whole time, and gross intracranial disease is frequently suspected. In about half the cases the visual aura and primary symptoms are present. Others have no headache at all, only the aura followed by vomiting.

COMMENCEMENT AND COURSE.

Migraine generally begins in childhood, and recurs in more or less regular attacks, say, once a fortnight or once a month; it attains its maximum severity during a period of life when the greatest efforts have to be performed. It is most troublesome during youth and middle age. After the age of fifty in both sexes it tends to diminish, and ultimately to disappear. Moebius has clearly shown that in nine cases out of ten migraine is a hereditary disease. We can sometimes trace quite definitely certain exciting causes which precipitate an attack in hereditarily predisposed patients; the commonest are mental strain and excitement, alcoholic excesses, and worry. There are other less important factors, such as gastro-intestinal disorders, constipation, menstruation, which sometimes precipitate an attack. Errors of refraction have been emphasised by Gould, of Philadelphia, as exciting causes, but their frequency is probably exaggerated. Most patients learn by bitter experi-

ence what particular exciting cause brings on their attack.

DIAGNOSIS.

There is no difficulty in typical cases of migraine. The difficulty is with the abortive and incomplete cases. An important point to remember in diagnosis is the complete immunity of the patient between the paroxysms of the attacks, and this one fact marks off migraine from a very large number of other pains which may be somewhat similar in distribution.

DIFFERENTIAL DIAGNOSIS.

Frontal-sinus suppuration does not cause paroxysmal pain, but is continuous. The pain of glaucoma may be confused with migraine, but here again the paroxysmal element assists diagnosis. The headache of syphilitic periostitis may be very intense, and even cause vomiting. The headache and vomiting of uræmia and the gastric crises of tabes can only be confused by the very superficial observer. Intracranial tumour sometimes simulates migraine, but in cerebral tumours we generally have some other physical sign, such as optic neuritis or paralysis. It is essential to bear in mind that certain tumours, especially of the occipital region, may produce migrainous visual phenomena, and until neuritis develops it may be impossible to say whether or not the patient has anything more than migraine. Most cases of true migraine come on in childhood, tumours at a later period of life.

Migraine in a number of cases is associated with epilepsy, and it may alternate with epileptic fits in some patients. We may have to diagnose between a migrainous attack and an epileptic fit, and this is sometimes a matter of considerable difficulty. The main thing to remember is that true epilepsy is associated with unconsciousness, whereas migraine is not. In Jacksonian fits, which may not be accompanied by unconsciousness, there is sometimes difficulty in diagnosing between the two conditions.

PATHOLOGY.

The pathology is much in dispute. There can be no doubt that it is a brain disease, but no gross anatomical lesions have been described in migrainous patients. It may be due to some lesion of the cortex in the occipital lobe, which would explain hemianopic symptoms. The pain is most likely due to irritation of the meninges, because brain disease itself does not cause pain as a rule until the membranes are affected. The vomiting is undoubtedly cerebral in origin. The great difficulty is to explain the recurrent paroxysms. To talk about "brain storms" does not advance our knowledge in the least. Some authors have written long treatises on the rôle of the cervical sympathetic in the production of dilated pupil and flushed face. But patients with gross disease of the sympathetic do not have migrainous attacks, moreover, this explanation throws no light upon the paroxysmal character of the disease. Another theory is that of recurrent toxæmia, and it is supposed that morbid products

which give rise to pain accumulate during the intervals. This does not explain why the disease is only one-sided, nor why it tends to get well with advancing years, when most other toxic diseases become aggravated. Perhaps the most ingenious theory which has been set forth is Spitzer's theory—that the primary lesion is a congenital stenosis of the foramen of Monro. This foramen connects the lateral and ventricles. The choroid plexuses of the lateral ventricles are continuous with each other and with those of the third ventricle through the foramen of Monro. If for any reason the choroid plexus closes up one or other limb of the foramen, all the phenomena of migraine follow, owing to over-distension of the corresponding lateral ventricle by the retained cerebro-spinal fluid, which cannot get out into the spinal canal. The distended ventricle stimulates the visual cortex and may produce the tinglings and the various other sensory auræ; later, by pressing the meninges, it produces headache. Finally the pressure becomes so great that the choroid plexus prolapses and permits the escape of the fluid into the third ventricle, when the paroxysm comes to an end. The foramen is temporarily dilated and only slowly contracts to its original size. This theory explains the recurrence of the symptoms, and also why patients tend to get better in old age.

TREATMENT.

We have to recognise that there is no one line of treatment applicable in every case, but there are a few general maxims which may be borne in mind. Migraine is a strongly hereditary disease. It is impracticable, however, to suggest that migrainous patients should not marry. Certain hygienic rules should be kept. Patients ought to avoid a sedentary occupation, especially if it is associated with a stuffy atmosphere. City offices are bad for migrainous patients, who should also be teetotalers. Excess, whether in food, tobacco, or in any other respect, should be avoided. Worry and all forms of excitement are bad. The gastro-intestinal functions should be regulated, the pelvic organs investigated in female patients, and errors of refraction set right.

DRUGS.

During the actual attack the patient usually retires to a dark room and lies down, to avoid noise and bright light. No single drug is a panacea, but that which in one form or other relieves the majority of cases is caffeine. The most convenient vehicle of administration is good black coffee. Various analgesic drugs are useful, the best being phenacetin, acetanilide, salicylic acid, or caffeine citrate combined with phenacetin and one of the bromides. Sometimes the same drug will succeed during one attack and fail the next time; for that reason we must be prepared to change our remedies. An excellent thing to try in many cases, especially if the hands and feet are cold, is to put the patient up to his neck in a hot bath. This relieves the brain hyperæmia, and can be assisted by cold applications to the head.

ILLUSTRATIVE CASES.

ROSE-BRADFORD KIDNEYS.

THERE are two chief forms of chronic Bright's disease, namely, granular kidney and chronic tubal nephritis. The latter sometimes arises definitely out of an original acute nephritis, which was diagnosed during the acute stage, but which failed to clear up in spite of treatment; it may also arise insidiously, however, without there having been any symptoms of a preceding acute nephritis at all; the kidney found post-mortem is a small pale one, microscopical examination of which shows that there is both epithelial degeneration and chronic interstitial fibrosis. When a small pale kidney of this kind develops insidiously it is sometimes called a Rose-Bradford kidney, to distinguish it from a precisely similar kidney that is secondary to a known acute nephritis. We have elsewhere brought forward evidence in favour of the view that Rose-Bradford kidneys are really secondary to a preceding acute inflammation, which attracted no notice because there was no œdema at the time; but be this as it may, there is no doubt that there is, clinically, a variety of chronic tubal nephritis which arises quite insidiously, and it is to the small pale kidney found at the autopsy in such a case that we attach the name "Rose-Bradford."

How long the mischief has been present in these cases before symptoms develop it is impossible to say. Judging from the amount of fibrosis there is in microscopical sections of the organs, the latter must have been diseased for a long time, months certainly, and probably years.

The symptoms that arise from Rose-Bradford kidneys are in the main similar to those to which granular kidneys give rise; and according to the kind of symptoms that first appear we can distinguish the following clinical groups:—

1. Those cases commencing with failure of the eye-sight from albuminuric retinitis.
2. Those with dyspnoea and heart failure.
3. Those with a severe hæmorrhage or apoplexy.
4. Those with symptoms of uræmia—chronic or acute.
5. Those in which an acute exacerbation of the nephritis occurs, so that unless great care is exercised the diagnosis will be primary acute nephritis instead of an acute exacerbation of a long existent latent nephritis.

The commonest of all the above groups is probably the last, though it is not of these that we propose to give examples to-day; we would, however, emphasise the fact that many a case in which the sudden onset of general œdema associated with albuminuria, hæmaturia, and casts seems to suggest an acute inflammation in kidneys hitherto healthy, is really a much graver condition—acute nephritis upon the top of chronic.

The next commonest group is the fourth, in which the first symptoms are those of uræmia developing in a person who hitherto had not only regarded himself as healthy, but who had been so regarded by all his friends. It is of these cases that we propose to give

examples. It will be noticed that *the patients are comparatively young*. That the prognosis is bad, much worse than it is when granular kidney gives rise to its first symptoms. That as a rule there is much albumen in an abundant urine of low specific gravity; the third case we give is an exception to this, for the urine contained no albumen at all. That there is little or no œdema; that the patients are pale; and that the left ventricle of the heart is hypertrophied.

CASE 1.—A girl, aged 13, had had measles years ago, and had once suffered from tape-worm, but had had no other illnesses, and had been strong and well in herself, though pale, until seven weeks before her death. She had not had scarlet fever as far as she knew, and she had never had any œdema, nor anything suggestive of an acute nephritis. Seven weeks before she died she began to have attacks of dyspnoea at intervals, but she did not see a doctor. The attacks were attributed to "asthma," but in view of the ultimate result there can be little doubt that they were not true asthma, but uræmic asthma. Three days before the end she had one of these dyspnoæic attacks, which was so bad that medical attention was sought. There was a soft systolic bruit in the pulmonary area, apparently hæmic in origin, otherwise the heart seemed normal, except for a prolongation of the first sound at the impulse. The lungs and the alimentary and nervous systems were natural. The urine was abundant, pale, of low specific gravity, free from sugar, but loaded with albumen; under the microscope many hyaline and granular tube casts were seen, and a few renal cells, but no red corpuscles. There was no œdema at all. The eyes seemed normal on ophthalmoscopic examination.

The acute dyspnoea subsided into a deep sighing respiration not unlike air-hunger; the girl had been conscious at first, but she rapidly became comatose. She remained in this condition for two days, and then her heart seemed to dilate rapidly; just before the end vomiting set in, and there was blood in the vomit. There was no convulsion at any time, death ensuing quite quietly during the coma.

At the autopsy the right side of the heart was found much dilated and not hypertrophied, whilst the left ventricle was considerably hypertrophied and hardly dilated at all; the valves were healthy. There was no brain lesion. The only radically diseased organs were the kidneys. Each of the latter was very pale, almost white, with no adherence of the capsule, though the surface was slightly granular; the cortex was extremely thin, the pyramids were atrophied and contracted, and it was very difficult to define the junction between cortex and medulla; the pelves were not dilated, the ureters were healthy; the arterioles were not thickened, and there were no cysts; each kidney weighed just over $\frac{1}{2}$ oz., and at the time of the autopsy the note was made: "each is about the size of an average oyster, i.e., the oyster, not its shell." The two most remarkable things about them were (1) their pallor, (2) their small size. They were typical small white kidneys.

The report upon the microscopical characters of a section from one of the kidneys was as follows: "The organ is so affected by the diseased process that it is with difficulty recognisable as renal. There is a very great excess of interstitial fibrous tissue, much of which has undergone hyaline degeneration. The vessels are not particularly thickened. Only here and there can the outlines of a glomerulus be discerned; the tubules have largely disappeared; those which can still be distinguished are shrunken and constricted by the fibrous tissue."

It may be remarked that, although the condition has usually been termed chronic *tubal* nephritis, the main feature of the sections of these small white kidneys is always the great excess of the *interstitial* fibrous tissue with disappearance of many of the tubules.

CASE 2.—A man, aged 32, had had measles as a child, but no scarlet fever; had served with the Army in India, where he had malaria badly; was of temperate habits, and denied all venereal trouble; had had "influenza" often during the last four years; but had not been "ill" until seven weeks before he first came under observation. He began to suffer from nausea and vomiting without apparent cause; this increased rather than diminished, headache and insomnia supervened, and latterly he had suffered from unaccountable attacks of severe dyspnoea at night, associated with polyuria and intense thirst. These were the symptoms of which he now complained. He was a big man, but very thin and anæmic. There was no trace of œdema anywhere. His temperature, pulse, and respiration rates were natural. The lungs were natural; the heart was considerably hypertrophied, but showed no signs of failing. The blood pressure was high. The urine averaged about 60 ounces per diem, and it contained 6 parts per thousand of albumen; no blood or pus, but many granular and hyaline tube casts were present. Albuminuric retinitis was found on ophthalmoscopic examination. The diagnosis was clearly chronic nephritis and uræmia. The condition did not improve under treatment; a fortnight later there was severe epistaxis, followed by hæmatemesis, the latter being no doubt due to blood that had been swallowed. The mental condition remained fairly good until near the end, except for the persistent headache and insomnia. Ten weeks from the first onset of the nausea and vomiting, which were the first symptoms of anything being wrong, he suddenly became comatose, had one uræmic convulsion, and was dead. There was not a trace of œdema even at the end.

At the autopsy the brain weighed 1,300 grains, and looked perfectly healthy; the cerebral vessels were not atheromatous. The lungs, liver, spleen, suprarenal glands, pancreas, stomach, intestines, and aorta were all natural. The heart weighed 16 ounces; the right side was perfectly normal, so also was the left auricle; all the valves were healthy, the coronary arteries were good; the only abnormal part of the heart was the left ventricle, which felt like a cricket ball, owing to its uniform hypertrophy; its wall was $1\frac{1}{4}$ inch thick, and there was no dilatation. The kidneys weighed $2\frac{1}{2}$ ounces each; they were symmetrical small white organs. The capsules were thick and adherent, and when peeled off they left pale

granular bumpy surfaces mottled with specks of red. On section the cortex of each kidney was found to be a mere rim, about 1 millimetre in width; the pyramids were also shrunken, but to a less degree, the prevalent colour being a dull white splotched with crimson. The arterioles were not thickened; the pelvis of the kidneys were not dilated, but contained excess of fat. The ureters, bladder, urethra and testicles were all natural. The condition was obviously that of insidious chronic tubal nephritis.

The microscopical changes seen in sections of the kidneys were very similar to those in the first case. There was extreme interstitial fibrosis, with great irregularity of the tubules, and atrophy of many of them and of the glomeruli.

CASE 3.—A man, aged 28, an ex-soldier who had served in India, but who had always remained strong and well, began to suffer from symptoms of "dyspepsia" two and a-half months before he died. He attended as an out-patient at a hospital, and was thoroughly examined; *the urine was quite free from albumen and sugar*; the heart seemed to be of normal size; he was a thin man, but rather pale; there was no œdema anywhere; the fundus oculi was natural, and the diagnosis of ordinary dyspepsia appeared to be correct. There seemed no reason even to suspect that the kidneys were wrong; fortunately the absence of albuminuria is not the rule, or else most of these cases would be missed. The epigastric pains, nausea, and vomiting increased in severity, but the patient kept up and about until a fortnight before he died. The vomiting was then so severe, and the man felt so weak, that he took to his bed. The urine was tested on several occasions; it was always abundant, pale, and of low specific gravity, but was never albuminous when examined. When he had been in bed with the gastric symptoms for twelve days he had a bright red hæmatemesis, the amount of blood not being great; this was the only hæmorrhage; next day he became comatose, with twitchings of the left arm, paralysis of the right arm, pin-point pupils, but no general convulsions. Twenty-four hours after he went into this uræmic coma he ceased to live. There was no œdema even at the end.

At the autopsy the brain was perfectly healthy; the heart was not enlarged; there was recent pleurisy over both lower lobes, a terminal affection; but all the other organs were natural except the kidneys. These were small and pale, similar to those of the two preceding cases, with adherent capsule, pale, irregular surface, narrow cortex, and lack of definition between the cortex and medulla. The rest of the genito-urinary organs were quite healthy. Microscopical examination of sections of the kidneys showed much interstitial fibrosis, atrophy of many of the tubules, dilatation of others, fatty degeneration of many of the epithelial cells that were still left, atrophy of some glomeruli, whilst others were almost healthy; there were hyaline casts within some of the tubules. Notwithstanding the absence of albuminuria, therefore, the condition was one of small white kidney of insidious onset in a young person who had never had any recognisable acute nephritis—that is to say, a case of "Rose-Bradford kidney"; the first symptoms being those of chronic uræmia, which later became acute, and soon ended in death.

POINTS IN SURGERY.

THE TREATMENT OF FRACTURES FROM A COMMON-SENSE POINT OF VIEW.

II. SPLINTS AND RETENTIVE APPARATUS.

WHEN the ends of a fractured bone have been got into apposition, the surgeon must direct his attention to keeping them at rest in that position until union has occurred. This is done with some form of retentive apparatus. Nothing strikes the junior house surgeon with such force as the difference between the simplicity of the forms of retentive apparatus in actual use and the complicated nature of the various splints whose merits are advocated in the text-books of surgery. Intricate mechanical appliances like the double inclined plane and the Middeldorf triangle are often described in full, but are rarely, if ever, seen in the wards.

The wooden splint is the simplest possible form of retentive apparatus. Its object is not only to keep the fragments in position, but to immobilise the limb. Movement at the joints both above and below the fracture should be prevented. For example, in fractures of the middle of the shaft of the humerus it is important to keep both the elbow and shoulder at rest. The former object is achieved by using an angular splint (the internal angular is the easiest to apply and the most comfortable, and is the one in general use), and the latter by strapping or bandaging the whole arm to the side. Neglect of these precautions almost always leads to non-union or to pseud-arthritis, either of which complications may prolong the patient's convalescence for an indefinite period.

The splint must be well padded to avoid pressure over bony prominences, and must be firmly applied. The exact amount of pressure required in bandaging a splint to a limb can only be obtained by experience. It is obvious that if it is applied too lightly it will not keep the ends in apposition, while if the bandage is too tightly put on it causes the patient great pain, and may lead to œdema of the limb, or even to actual gangrene. It must be remembered that some effusion will surely take place later, and that a bandage which is just firm enough when the splint is applied may become dangerously tight within the next twenty-four hours. It is, therefore, a safe rule to examine all cases of fracture on the next day, particularly with a view to ascertaining whether there is any œdema of the extremities of the limb. If any is present the bandage must be reapplied, but if the patient does not complain of pain there is no reason to disturb it.

There is hardly any form of fracture occurring in a limb which cannot be efficiently treated by means of suitable wooden splints but there is one form of splint which is of great service in treating fractures of the tibia and fibula, the Bavarian plaster-of-Paris splint. It is very comfortable, and can be readily adjusted. It is a modification of Croft's splint, and has this advantage over the latter that it is more easy to adjust, and does not demand a series of exact measurements. It is made as follows: Two pieces of house-flannel of sufficient size to enclose the limb are stitched together longitudinally down their

centre. The limb is placed on these, and the inner piece of flannel is stitched over the front of the limb down the middle line of the leg and along the middle of the sole of the foot, so that it fits it closely like a stocking, and the flannel is then cut round about two inches from the stitches so as to leave a projecting fringe. The outer piece of flannel is now cut to shape the limb exactly, so that its edge corresponds to the line of stitches in the first piece. The interval between the two pieces of flannel is then filled with plaster of Paris, and the projecting fringes of the inner piece of flannel are turned down over the outer piece; a thin coating of plaster may be applied over all with the hands. The splint should extend from above the knee to a transverse line round the fifth metatarsophalangeal joint. When the plaster has set the splint can be easily opened down the front of the leg and the sole of the foot, because the projecting pieces of the inner layer of flannel protects the stitches from being embedded in the plaster, and it can be removed from the limb because there is no plaster in the original line of suture between the two pieces of flannel behind: thus a natural hinge is formed, so that the splint can be taken off without cracking the plaster. This form of splint will be found most simple and most efficient.

Cases, however, constantly occur in which the ordinary forms of retentive apparatus, however skilfully applied, are incapable of keeping the fragments in apposition. For instance, in fractures of the femur, which will be dealt with in detail in a subsequent article, it is a routine practice to apply extension to the limb for that reason. In these cases the surgeon has the choice between applying some form of extension apparatus and fixing the fragments by an open operation. Wherever the former alternative is possible there should be no hesitation in adopting it, since there are many objections to open operation. Some well-known surgeons advocate wiring the bones together in nearly all forms of simple fracture. But it must be remembered that by open operation a simple fracture is at once converted into a compound one. This is no great matter if asepsis can be assured; but if not the ultimate result will be worse than if no operation had been undertaken. What, then, are the indications for wiring the fragments by open operation in simple fractures? It is justified in the following conditions: (i.) Where there is wide separation of the fragments, as in fracture of the patella or olecranon; (ii.) in very oblique fractures of a long bone where the fragments override and much deformity is likely to result; (iii.) where the fragments cannot be retained in position by the ordinary forms of apparatus. A good example of this is afforded by supracondyloid fractures of the humerus in muscular men. The lower fragment is pulled upwards by the triceps. The ordinary forms of splint are incapable of retaining the fragments in apposition, and it is impossible to apply satisfactory extension in this situation.

CONGENITAL TALIPES EQUINO-VARUS.

I.—GENERAL CONSIDERATIONS.

WE have little exact knowledge of the causation of congenital talipes equino-varus. It is generally attributed to mechanical causes due to malposition of the fœtus in utero. According to Parker, who has given special attention to the subject, there is commonly a small degree of equino-varus even in normal infants, and the tendency to inversion of the foot is subsequently lost when they begin to walk. If the tendency to inversion is advanced, the malposition is not corrected, and the deformity is permanent. He states that the common modes of production of the intra-uterine deformity are as follows: (1) Locking of the parts due to abnormal position of the limbs; (2) abnormal position of the limbs without locking; (3) abnormal position of the limbs due to intra-uterine pressure from deficiency of the liquor amnii. In addition to these, a small proportion of cases are undoubtedly due to imperfect osseous development or to spinal anomalies, particularly to spina bifida.

From an anatomical point of view the deformity is a double one; there is an abnormal condition of the parts at the ankle as well as at the mid-tarsal joint. Clinically the condition may be recognised by the following points: (1) The heel is drawn up and the foot is extended; the heel itself is often imperfectly developed. (2) The whole foot, anterior to the mid-tarsal joint, is drawn inwards, and is rotated at the joint so that the sole is inverted. (3) The internal border of the foot is shortened and bent upon itself, so that the inner malleolus is buried in its concavity. (4) The external border of the foot is convex; and after the child has begun to walk callosities are developed in the skin over it because the weight of the body is transmitted to this part. (5) The upper surface of the astragalus forms a projection on the dorsum of the foot.

Cases of talipes may be arbitrarily divided into three classes. The first is that in which the deformity can be rectified by manipulation. It is rare to meet cases in quite young infants where the foot cannot be brought into position by the exercise of slight manual force. Occasionally the abnormal shape of the bones is so marked as to render this impossible. But even where this is the case, treatment by manipulation, if patiently carried out, will eventually be successful, since the bones are still cartilaginous, and can be moulded in a surprising manner.

The second class of case is met with in children who have begun to walk without any attempt having been made to treat the condition. Here restitution of the foot to the normal position is resisted by the shortening and contraction of the soft parts. The ligaments affected are the plantar fascia, the anterior part of the deltoid ligament, and those surrounding the astragalo-scapoid articulation, particularly the spring ligament. The muscles of the affected limb are ill-developed, and do not acquire the same size as those of the normal limb. The shortening of the tendo Achillis tends to increase the extension at the ankle-joint, and the contraction of the tibialis posticus increases the inversion of the sole of the foot owing to its intimate association with the bones of the

tarsus. The short muscles of the sole of the foot are also secondarily contracted. In these cases the deformity can only be corrected after tenotomy of the resisting structures.

The last class consists of cases of talipes in adults, in whom the bones have been allowed to ossify in their abnormal position. The neck of the astragalus is now permanently deflected downwards and inwards, so that its obliquity is greatly increased, and its upper articular surface is so much broadened that it cannot be replaced between the malleoli, and the extension at the ankle-joint cannot be reduced without an open operation. Furthermore, ankylosis has taken place at one or more of the normal tarsal joints, and new ones have been formed to meet the altered condition of affairs.

In dealing with any case of talipes, the practitioner must be prepared to answer two questions which the relatives of such patients always ask:

1. Will the patient ultimately have a shapely foot?
2. Will he be able to walk as well as a normal individual?

In an infant who has not yet begun to walk the result of treatment begun at once and continued patiently over a long period is almost uniformly good: a fact which accounts for the comparative rarity of cases of bad talipes in adults of the well-to-do classes. But when secondary contraction of the soft parts has already occurred, or when the bony changes have been allowed to become permanent, a guarded prognosis must be given, because the results of such cases are proportionately disappointing.

BOOKS RECEIVED.

E. MARLBOROUGH AND CO.

"Travellers' Practical Manual of Conversation."

T. NELSON AND SONS.

"The History of David Grieve." By Mrs. Humphry Ward.

"The King's Mirror." By Anthony Hope. Nelson Library.

"John Charity." (Nelson Library.)

Great Eastern Railway Co.'s Tourist Guide to the Continent.

H. FROWDE AND HODDER AND STOUGHTON.

"Auscultation and Percussion." By S. Gee, M.D.

"Heart Disease and Thoracic Aneurysm." By F. J. Poynton, M.D.

"Clinical Lectures and Addresses on Surgery." By C. B. Lockwood.

"Operations of General Practice." By E. M. Corner, M.A., and H. Irving Pinches, M.A.

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"Health in the Home Life." By Honnor Morten.

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"A Skin Pharmacopœia." By J. Startin.

"Through Jamaica with a Kodak." By Alfred Leader.

DERMATOLOGY.

DISEASES OF THE NAILS.

It may be that affections of the nails are unattractive, or that they give rise to little or no suffering, or that their treatment often proves unsatisfactory; nevertheless, the fact remains that these useful appendages and their diseases have received but scant attention alike from clinical observers and the writers of dermatological treatises. Nails are only modified epidermis, after all, and therefore we might expect them to share more frequently in the disorders of that tissue than they actually do; but owing to their resistant structure they appear to enjoy a sort of immunity from many skin affections proper.

Putting aside such trifles as white spots, made much of by the superstitious, the presence or absence of the lunula, and the transverse ridges or grooves marking the occurrence of some illness, the most important morbid conditions of the nails met with in practice are those affecting their polish, shape, and texture. Strong, highly polished nails, devoid of grooves or spots of any kind, are generally associated with bodily vigour, but they have also been observed in the gouty (Hutchinson).

ABNORMAL GROWTH.

A given finger-nail is said to be completely renewed in 124 days upon an average, the exact time depending upon the time of year and the general health. In very neglected cases genuine hypertrophy may occur, so that the nail degenerates into a veritable claw, forming, when the horny growth is much exaggerated, the condition known as onychogryphosis, which is not uncommonly seen affecting the great toe-nails of elderly persons. The opposite condition is one of extreme brittleness, the nail-plate being at the same time reduced to a thin film. Small pieces of the nail are continually being chipped off as the result of slight injuries, catching in the clothes, etc., and tearing may occur, leading to bruising and soreness of the matrix. At other times the whole substance of the nail seems little more than a mass of densely packed fibres, which easily become separated from one another, causing an unpleasant roughness of the nail. When a disease is limited entirely to the nails the diagnosis is "little more than guesswork." Fortunately there are nearly always some indications upon the skin which are a guide, at any rate, to the true condition affecting the nails.

Atrophy of the nails may occur after an acute illness, especially one of the exanthemata, and their direction of growth and texture may both be altered considerably. Several cases of "spoon-nail" (koilonychia) have been shown of recent years before the dermatological societies in which the nail-plate is concave upwards, presenting a very curious appearance. Most of the above nail troubles are associated with some constitutional weakness, and arsenic given internally is often of great value.

RINGWORM OF THE NAILS.

The ringworm fungus sometimes attacks the nails

(onychomycosis) either alone or together with some other part of the cutaneous system. The disease is frequently missed, as the subjective symptoms do not always lead the sufferer to seek advice. The nails lose their lustre, and become thickened, dull and brittle. Part of the nail-plate may scale off, revealing a roughened, disintegrated surface. Without a microscopic examination of scrapings taken from the nail and mounted in potash solution the diagnosis can scarcely be made at all. A case of tinea unguium was recently exhibited by Dr. Graham Little before the Dermatological Society, in which all the nails of both hands and feet had been thus affected for fourteen years! Considering how frequently children with ringworm of the scalp must scratch, and therefore, presumably, infect the nails with the fungus, it is surprising that disease of the nails is not more often observed. Adults are, perhaps, affected more than children.

Removal of the nail under an anæsthetic is a radical cure, but if this is impossible the best plan is to scrape the nail thin with a file or a piece of glass, after which a parasiticide ointment, such as chrysarobin or ammoniated mercury, may be applied. What is known as "Harrison's treatment" is perhaps the best and the most universally applicable. It consists in covering the affected nails with pieces of lint soaked in a solution of potassium iodide in potash for fifteen minutes, followed by a similar application of lint soaked in a solution of perchloride of mercury in spirit for twenty-four hours. Indiarubber finger-stalls may be worn throughout the treatment, which is cleanly and easy to carry out. The formula of the two solutions is thus given:—

NO. I.—POTASH SOLUTION:—

| | | | | |
|-----------------|-----|-----|-----|-----|
| Potass. Iodidi | ... | ... | ... | 3j |
| Liquor. Potassæ | ... | ... | ... | |
| Aq. Dest. aa | ... | ... | ... | 3ss |

NO. II.—MERCURY SOLUTION:—

| | | | | |
|------------------------|-----|-----|-----|---------|
| Hydrargyri Perchloridi | ... | ... | ... | iv grs. |
| Spirit. Vini Rectif. | ... | ... | ... | |
| Aq. Dest. aa | ... | ... | ... | 3ss |

PSORIASIS AND ECZEMA OF THE NAILS.

It is convenient to consider these two affections together not only because they are comparatively common, but on account of their similarity and difficulty of diagnosis. In both affections the nail-plate may be lifted somewhat away from its bed, and may undergo a certain amount of thickening. The adjacent skin about the finger-tips may be affected with the disease also, and if this be the case the diagnosis is easier. Small, black depressions are apt to occur in psoriasis of the nails, and irregular grooving is more usually seen in chronic eczema. Discoloration of the nails is met with in psoriasis, but it is also a feature of ringworm. The best applications are ointments of tar and salicylic acid, which should be kept continuously applied to the nails enclosed in appropriate finger-stalls. Such conditions as onychia (purulent inflammation of the matrix) and ingrowing toe-nail must be treated wholly on general surgical principles.

PUBLIC HEALTH AND HYGIENE.

LIMITED TERM APPOINTMENTS OF MEDICAL OFFICERS OF HEALTH.

At a recent meeting of the Rural District Council of the New Forest, the Clerk intimated the receipt of a communication from the Local Government Board announcing the expiration of the term of the appointment of Dr. Sheppard as Medical Officer of Health. The occasion was seized upon by a few of the Councillors as a timely one for "applying the screw." We quote from the *Hampshire Independent*:—

The Rev. J. J. Daly urged that in future before the medical officer reported to the Local Government Board he should submit his report to the Council. In Lyndhurst they thought they were not fairly treated in the last report, and when he came to the Council and found it had been forwarded to the Local Government Board without being submitted to the Council he thought it was a most extraordinary proceeding. In order that that might not happen again he would propose that in future the medical officer should submit his annual report to the Council before forwarding it to the Local Government Board. The medical officer must have known that they were doing their best to supply Emery Down with water, and he thought he should not have referred to it in his report.—Mr. Fletcher proposed the re-election of Dr. Sheppard at his former salary, subject to the approval of the Local Government Board.—Mr. Lermite seconded the proposition.—The Rev. J. J. Daly proposed, as an amendment, that the appointment be deferred till the next Board day, to give Dr. Sheppard an opportunity of saying whether he would acquiesce in the request of the Council.—Mr. Wadsworth seconded the amendment, and suggested that other candidates might be invited to apply. ("No, no.")—The Rev. J. J. Daly said he would withdraw the amendment, and the proposition was carried.

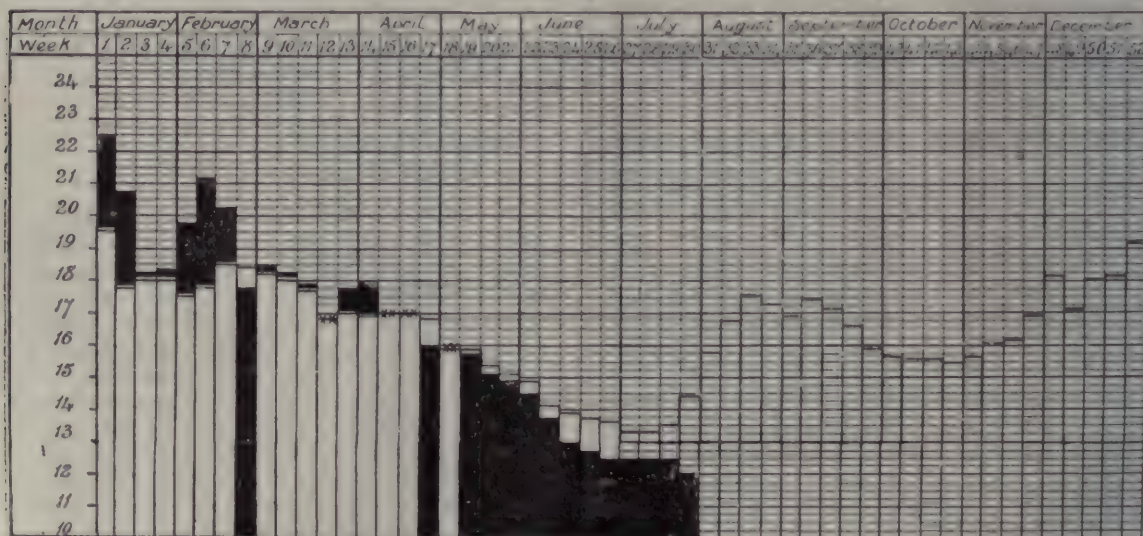
The Councillors who submitted the Medical Officer of Health to the indignity of the proceedings reported doubtless felt that they had a legitimate grievance, but it is intolerable that an officer who is carrying out the explicit instructions of his official superiors should be placed in so ignominious a position through the ignorance of the Councillors whom he more immediately serves.

A general order of the Local Government Board as to the duties of medical officers of health provides that: "He shall give immediate information to us of any outbreak of dangerous epidemic disease within the district, and shall transmit to us a copy of each annual report and of any special report. He shall make a special report to us of the grounds of any advice which he may give to the sanitary authority with a view to their requiring the closure of any school or schools," etc.

Other officers of local authorities whose duties do not require them to report to the superior authority are not, as the medical officer is, appointed from year to year. Why should this distinction be made in the case of the Medical Officer of Health? It would be a simple act of justice if the Local Government Board would, before approving the conditions of appointment of a medical officer of health, insist that the term for which he is appointed shall be indefinite, as is the case with other municipal officers.

DIAGRAM OF THE WEEKLY DEATH RATE IN 1907.

Showing the weekly death rate for 1907 and the mean weekly death rate for the last Quinquennial of the 76 great towns of England and Wales.



White columns show mean weekly death rate for last Quinquennial. Black columns show weekly death rate for current year. Where death rate for 1907 is in excess of the Quinquennial mean the excess is shown in black above the white column which represents the mean.

Where death rate for 1907 is below the Quinquennial mean the black column is shown in its entire length, the white column which represents the mean, showing above the black.

Where the death rate for 1907 coincides with the Quinquennial mean, it is shown thus xx.

RESIDENT MEDICAL OFFICERS' DEPARTMENT.

[Contributions to this Column are invited, and, if accepted, will be paid for.]

PROGNOSIS IN BURNS AND SCALDS.

By A. G. L. READE, M.R.C.S.Eng., L.R.C.P.Lond., House Physician and late Senior House Surgeon, the Radcliffe Infirmary, Oxford; and J. W. SCOTT MACFIE, B.A.Cantab., M.B., Ch.B.Edin., Assistant House Surgeon, The Radcliffe Infirmary, Oxford.

OF all the cases with which the casualty officer is called upon to deal perhaps none require his serious consideration so much as those injuries arising from slight burns and scalds. It is often difficult to realise the danger of a small burn or scald, and the house surgeon may be inclined to grudge a bed to a case that might, it would seem, be met by a simple dressing. And yet, if he should yield to the pressure of an overcrowded ward and allow such a case to go out, he may subsequently have reason to reproach himself for the most serious consequences. Briefly, the prognosis in cases of injury from burns and scalds may be said to depend on five things, namely: The age of the patient, the extent of the injury, its site, its depth, and the subsequent occurrence or avoidance of sepsis. A burn is always serious at either extreme of life, and should be treated with corresponding care. In children, in addition, the relative area involved is naturally greater, and this is a further danger. When a third of the body is involved, death from shock and toxæmia is invariably the result, but, as is illustrated in one of our cases detailed below, death may result from even a very small scald. In some situations burns are very much more dangerous than in others. This is especially the case in burns about the head and trunk, which must always be looked upon as serious. With sepsis, which, of course, prejudices prognosis, whenever it occurs, may be associated the other secondary complications which occur in cases of burns and scalds—such as lung troubles, the contraction of cicatricial tissue, œdema glottidis, and the occurrence of duodenal ulcer, which, although always described among the other sequelæ of burns, is very rarely seen in actual experience.

Three cases which have recently come under our notice illustrate admirably the importance of regarding even slight burns and scalds as serious injuries.

CASE 1.—The first case is that of a child two years of age—a little girl who accidentally sat down in a basin of very hot water, and was brought up to the hospital immediately after the accident. On examination she was found to have a red and inflamed area over one buttock; there was no desquamation, no destruction of the skin, but simply an erythematous area. The injury was regarded as trivial, but as a precautionary measure the child was admitted to one of the wards. For two days the patient appeared to be doing well, but on the third day cyanosis set in, her pulse became shallow and rapid, and in the evening, despite all efforts to improve her condition, she died. At the post-mortem examination it was found that she had acute congestion of both lungs, which had no doubt been the immediate cause of death.

CASE 2.—The second case is that of a laundry maid, who had the misfortune to get her hand burnt by the hot rollers used in her work. She appeared to be suffering from a burn of the second degree, involving the palmar aspect of all the digits, and complained of great pain. She was admitted to the hospital, and treated in the first instance with picric acid. Later she was treated daily for some time with two-hour boric baths, and oiled silk or boric ointment dressings. In a very few days the pain subsided completely, and the fingers were cautiously extended. But, when the dead skin began to slough away, and the wounds discharged some pus, it was thought necessary to readmit the patient, so that she might be treated by a continuous boric bath. In spite of this treatment the sloughing process extended so deeply that the phalanges were exposed in the third, fourth and fifth digits, and the palmar aspect of the index finger was reduced to a mass of granulation tissue.

CASE 3.—The third case is typical of a lamentably common accident. It is that of a little boy, three years of age, who had sucked the spout of a kettle of hot water. On admission the child was not dyspnoeic, but, as was anticipated, œdema glottidis soon succeeded, so that the same evening it became necessary to perform tracheotomy to relieve the dyspnoea and cyanosis. On the third day after admission the boy died. At the post-mortem examination congestion of the lungs was found in addition to the œdema of the glottis. When a child is brought in with a history of having sucked a kettle spout, it should not be allowed to leave the hospital for some days, even although it presents no alarming symptoms at the outset.

These three cases illustrate some of the difficulties that are encountered in estimating the prognosis in cases of injuries from burns or scalds, which, on superficial examination, appear to be inconsiderable. If the little girl in the first case had been allowed to leave the hospital and had subsequently died at home, it would, we think, have been difficult for the house surgeon to justify before the jury of the coroner's court his action in discharging the case. And in the second case, if a favourable prognosis had been given on the appearances at first presented, the surgeon could hardly have been surprised if his patient had suspected incompetent treatment, when later on he was compelled to confess that her injuries were so serious as to necessitate amputation of the fingers perhaps, or at best a laborious course of skin grafting. And therefore we would urge that in considering the injuries arising from slight burns or scalds a very guarded prognosis should be given both as to the immediate and the ultimate consequences.

TROPICAL DISEASES.

LIVERPOOL SCHOOL OF TROPICAL MEDICINE.

A NEW expedition has been fitted out by the Liverpool School of Tropical Medicine to proceed to the West Coast of Africa and investigate black-water fever. It consists of Drs. Yorke and Barrett, and they were recently entertained at a farewell dinner given at Liverpool. The disease is one of great importance to many of our Colonies in Africa, and as its etiology is somewhat obscure it is to be hoped that the investigators will reach some definite conclusions. In addition to this expedition, two others from the same school are at present abroad, one in Peru studying yellow fever, the other in Africa studying sleeping sickness.

RECENT RESEARCHES ON KALA AZAR.

CAPTAIN W. S. PATTON, M.B., I.M.S., has recently considerably advanced our knowledge of the extra-corporeal phases of the Leishman-Donovan body, the parasite of Kala Azar. Following up a suggestion of Rogers that the bug might act as an intermediate host for this organism, he has found all the intermediate stages of development and numerous fully developed flagellates, similar to those seen in cultures of splenic blood, in the stomachs of bugs. This interesting observation tends very strongly to incriminate the bug as the carrier or spreader of that terrible malady. It still remains to be proved how the parasites escape from the bug back to man, but the observations of Rogers as to the peculiar house spread of the disease in Assam brings further proof to support the view that some domestic insect has to do with the spread of the disease, and none is more likely in this connection than the bug.

SLEEPING SICKNESS.

A CONSIDERABLE amount of work has recently been accomplished in regard to the treatment of sleeping sickness, including under that term the early cases (trypanosomiasis) of the disease. An International Conference recently met in England to discuss the general question of the spread of the disease in Africa and other points, but nothing very definite resulted from the deliberations that took place. It is difficult exactly to see in what way a Conference could control the scientific work that has been and is being done in many of the phases of this disease, and the German delegates expressed themselves on this point somewhat strongly. The credit of the discovery of a drug that has proved more efficacious than any others tried before must go to the Liverpool School of Tropical Medicine. The names associated with the introduction of atoxyl in the treatment of trypanosomiasis are those of Thomas and Breinl, while Tod, another worker in the same school, has in frequent articles published from time to time, drawn special attention to the modes of administering it and some

of the results obtained. The latter observer in a memorandum by himself, and also later in a combined paper with Breinl, advocates the following method for giving the drug. "Atoxyl must not be given by the mouth, since it is certainly broken up by the acid contents of the stomach, and the untoward effects of over-treatment by arsenic are thus more easily produced. We believe that the intravenous injection of a solution of atoxyl in distilled water is the method to be preferred. Its difficulties are apparent, and in routine treatment it will probably be usually replaced by subcutaneous injections. As in the ordinary administration of arsenic, the organism should be gradually accustomed to the drug. We believe that this can best be done by using a 20 per cent. solution of atoxyl in sterile normal saline. The solution should be warmed to blood heat just before use. In this way the drug is completely dissolved, and the pain at the site of injection, which occasionally follows atoxyl, is obviated. Give subcutaneously daily for four days 0.6 c.cm. On each of the four succeeding days give 0.8 c.cm., then raise the dose for a week to 1 c.cm. of the solution each day. Now give 1 c.cm. every two days for a fortnight. Then reduce to 1 c.cm. twice a week until all symptoms have disappeared and the patient's blood is negative to subcutaneous inoculation into susceptible animals. Afterwards 1 c.cm. should be given weekly for as long a period as possible. Should signs of poisoning arise, the same doses should be given but less frequently." They also point out that it is useless attempting the atoxyl treatment unless the patient is prepared to continue it carefully and intelligently for long periods, and of course at the same time attempts must be made to build up the patient's health by good food, fresh air, and other means. Daniels, quoted by the same authors, states that in two cases of human trypanosomiasis, treated with 10 minim doses of a 10 per cent. solution, the dose gradually being increased to 25 to 30 minims on alternate days, for fourteen and ten months respectively, have now none of the symptoms of the disease, and parasites can no longer be found in their blood. In addition to being in perfect health their blood is no longer toxic to guinea-pigs or rats. Such results are very promising, but, as Breinl and Tod point out, we must beware in concluding that the amelioration, which follows the giving of the drug, is to prove permanent. Several years must elapse before one can say, and the cases must not be lost sight of. Koch is reported to have stated that the drug is as good a specific for sleeping sickness as quinine is for malaria, but, on the other hand, Kopke, though getting good results at first, found that the cases relapsed and died later. Recently Nierenstein, another worker at the Liverpool School of Tropical Medicine, has found that a combination of atoxyl and mercury has given better results on animals than atoxyl alone, and strongly recommends the trial of this combination on human cases. It will be exceedingly interesting to note what results will follow such a treatment, and also to see if someone will come forward with some new drug still better than those which have gone before.

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

THE PROPER HOUSING OF INCURABLES.

HOME AND HOSPITAL FOR JEWISH INCURABLES, TOTTENHAM.

WE have on more than one occasion called attention to serious defects which exist in connection with the management and administration of the affairs of hospitals for incurables in this country. We recently raised our voice in protest against the too lavish expenditure which is being incurred by certain authorities in regard to the provision of open-air blocks for the reception of incurable maniacs resident in asylums. There is, however, a wide gap between unnecessary and indefensible extravagance on expenditure, and an outlay upon upkeep, nursing care and maintenance, justified by the efficiency of the arrangements and the comfort of the patients. The case, too, of those who, though incurably ill, have a clear and intelligent mind, apart altogether from frequent and sometimes continuous suffering, presents one of the saddest pictures known to man. It is clearly the duty and privilege of the hale to take especial pains to provide and secure adequate care for incurable cases of this latter class. Yet we have formed the opinion from our inspection of various institutions that it is rare to find a high tone and the absence of a despotic spirit within the hospitals for incurables with which we are acquainted. We suppose that the very fact that patients may reside in such a hospital for decades of years tends to create a certain atmosphere of discontent, which is not unnaturally resented by the officials. So a despotic spirit may be found in antagonism to something akin to a sense of oppression among the patients. Whatever be the cause it is clear to us that it would be a great blessing if the spirit of real genuine kindness, forbearance and patience could be maintained within the walls of every institution devoted to the care of incurable patients. At present this spirit is sometimes far to seek, and to its absence may be due a multitude of small miseries which in the aggregate may mean much to individual patients during the long martyrdom of suffering which patients have to undergo as a qualification for admission.

Quite recently the Chief Rabbi very kindly and insistently took us to see the Home and Hospital for Jewish Incurables, High Road, South Tottenham. This institution, after seventeen years of existence, has found an excellent site at Tottenham, and has been designed upon a plan which makes it more than usually attractive as a place of residence. There are a sufficiency of gardens laid out in an attractive manner to make it possible to give the 66 inmates all the pleasure which open-air life affords at such seasons as it may be a pleasurable one in these islands. Of the 66 inmates, 28 are men and 38 women; the care of these patients is entrusted to a staff of nine female and four male nurses, in addition to the matron and assistant matron, and there are nine domestic servants including the cook, with an engineer, a porter and a gardener also employed. In addition to a consulting

staff there are also a medical officer and a dental surgeon. The expenditure in 1906 amounted to £3,852, of which sum the income fell short by upwards of £900. The Chief Rabbi, who is the patron of this institution, pays it periodical visits, takes the deepest interest in its welfare, and never fails to conduct a service on each occasion. We may further note that the president is Mr. Stuart M. Samuel, M.P., whose services to the institution were recorded on his fiftieth birthday by a resolution of the Board of Management, which declares that, the institution is under a deep debt of gratitude to this gentleman for his powerful advocacy of its case, as well as for the many years of service he has ungrudgingly devoted to its interests. Certainly Mr. Samuel may be proud to be president of so fine a building, which is maintained in excellent order by Miss Olga Phillip, the matron, and her staff, and which has an atmosphere about it which conveys the impression that here at any rate every patient is comfortable and happy. We have never visited any home for incurables where we have felt so satisfied that this was the case. We hope, however, that the demands for admission will not lead the Board to crowd the wards, for, should overcrowding be permitted, much of the usefulness and more of the comfort of the patients may be destroyed, whilst the health of all the inmates may be seriously affected for the worse.

No portion of the community provides so carefully, and on the whole so well for its poorer members as the Hebrew race, and we feel confident that if, as the report records, the applicants awaiting admission attain to a number which will necessitate the completion of the entire building, according to the original plans, prompt steps will be taken to issue an appeal. We have every confidence that all the money needed will speedily be subscribed, for this institution, as its name implies, is not only a hospital, but, as far as we can judge, a home in the best meaning of that word. Entering the institution as we did, without notice, and having gone carefully over it from top to bottom, we formed the conclusion that the general management was good and sound. We incline to the feeling, however, that more active supervision might be exercised over the sanitary sections of that portion of the building which is devoted to male patients. Here in all institutions of the kind constant, intelligent, self-denying supervision is essential, for without it the atmosphere of the wards and corridors may suffer, and, in addition, not only the health of all but the reputation of those immediately responsible. We mention this point because it brings out clearly that as a whole the Home and Hospital for Jewish Incurables at Tottenham is an institution of which its conductors may feel deservedly proud. We hope that it will long continue its useful work, and that its funds may always be at least adequate to meet the claims and necessities of every deserving incurable.

SOCIAL AND POOR LAW PROBLEMS.

PROMPT REGISTRATION AND INFANT LIFE.

TOWARDS the end of last summer the St. Pancras Borough Council adopted tentatively a scheme for inducing parents to register the births of their children as speedily as possible by promising the father, or failing him a person attending the mother, a shilling if the birth was notified within forty-eight hours of its occurrence. The reason for this honorarium was that early notification of a birth facilitates the operation of many of the efforts now being made to secure the life and health of the babies of the poor. Attention which later would be regarded as impertinences are accepted as suitable compliments to a "new baby" and its mother. The health visitor may call, and if she is a tactful person may give good advice and even leave a card of instructions as to the bringing up of infants, without being regarded at that interesting time as an intruder. In cases of real poverty the health visitor can provide food which may save the life of both mother and child, and in those more numerous cases where the fault lies with improper rather than insufficient feeding, sensible facts about food, baths, clothing, and the like—especially if told as personal reminiscences rather than as didactic statements—may have a useful effect. The scheme was introduced for a period of three months, and it seems that the St. Pancras parents approve of it, for the number of births notified within the time-limit was 299, and the amount paid out in fees nearly £15. Dr. Sykes, the medical officer of health for the borough, is of opinion that the plan has fulfilled the purpose for which it was intended, and the results of this early notification are so satisfactory that he considers it desirable that a law should be passed to make the registration of births within five days of their occurrence compulsory, as is the case with deaths. This would prevent the delay in registration which at present in many cases reacts so unfavourably upon the child.

WORKMEN'S CLOTHES.

A CURIOUS case recently tried at Bristol raises a new point in the rules of public courtesy. Two colliers were summoned for entering a tramcar, and remaining there in defiance of the conductor, while in their working clothes, "they being persons whose clothing, in the opinion of the conductor, might soil or injure the cushions or the clothing of other passengers." A miners' agent was also summoned for abetting them. The men had come straight from the pit; they forced their way past the conductor, and it was on the advice of the agent that they refused to leave the car when asked to do so. The defence was that the tramway company had no right to differentiate between different classes of working men. Their by-laws permitted them to do so, but it was contended that the by-law was unfair. The Bench, however, declined to take this point of view, and each of the men was fined 25s. It seems to us a step in the right direction when the fact that a person's clothes are offensive is made a reason for excluding him from public conveyances. In such a case the worse has always the power to exclude the better, and clean people would be obliged to do without a convenience established for the benefit of all because the dirty intruded their offensive presence. It is difficult to see why English workmen of nearly all kinds invariably go about in garments which make their neighbours draw aside from them. There are many trades in which a man cannot help getting his clothes soiled, but an overall of some kind, like the blouse of the French working man, which could be removed when he left his work, would prevent him being a source of offence to others. In America the self-respect of the worker prevents him going about in

dirty, soil-stained attire, and many employers provide toilet-rooms, where the men can wash and change their outer garments before going into the street. With regard to miners, it should not be impossible to provide baths at the pithead, where they could wash when they came up from their work and put on clean clothes. The practice would tend towards their own comfort and also that of their wives, whose attempts at keeping a clean home are handicapped by the arrival of the bread-winner in a state of grime that will undo the best efforts of a good wife.

THE IRRESPONSIBLE FATHER.

MRS. MACKIRDY, better known as Miss Olive Christian Malvery, has at last said the sane true word that has long been wanting on the subject of sweating. Most writers are content to blame the employer, the capitalist, and the whole social system for the evils of underpaid work; and there is nothing so safe or so futile as such generalities. The employer, whose work is given out to be done in private homes, cannot know the conditions under which it is performed, still less can the capitalist who lends his money to a business, and the social system—is everybody and nobody! But Mrs. Mackirdy, in her book on "Baby Toilers," blames the father—the lazy, irresponsible father who thinks he has fulfilled the whole duty of man when he has earned enough for beer-money, and leaves to his wife the work of keeping up the house and feeding and clothing, as best she can, herself and the children. To do so, she takes work—any work—at any wage she can obtain, and when her own unaided exertions cannot provide money enough for rent and such food and fire as the human frame cannot exist without, the children help in the work. This is the condition of things wherever what are called "home industries" are pursued. The evils of factory work for married women are many, but it is doubtful if they are as great as those that spring from wage-earning in the home. In the factory the woman herself and her unborn child suffer; in the home the children who have come to conscious life are martyrs as great. School hours give a certain respite—for teachers, as a rule, do not expect too much from the weary little creatures who have been working before they came to school and will have to work again when they go home—but, as is natural, under such circumstances they can provide little of the teaching that may enable the children to rise above their present miserable conditions. The result is an enormous death-rate among children, and such a poor physique among the survivors that as a national asset they are practically worthless. Complaints, however, are of little use without some proposal for cure. As a first improvement we would suggest the registering as a workshop of every place where work is done for pay. The inspectors of these "workshops" would require to understand that their visits must as often as not be paid outside ordinary working hours. Secondly, much harsher treatment should be dealt out to the able-bodied "out-of-work." The little girl in the Rev. Richard Free's parish who said that her father had been out of work "all his life" probably said a truer thing than she knew. Thirdly, a great reduction of the sentimental charity which, in the desire to make things easier for the children, enables the parents to shirk their natural duties. If, finally, young women of the lower classes could be persuaded that it is better to remain unmarried than to tie oneself for life to a man who cannot or will not maintain his family, a great deal of misery might be avoided, and we should not have so many children brought into the world to struggle, half-starved, through a few suffering years, and then to die.

SOCIAL PROBLEMS OF THE DAY.

WILL UTOPIA EXCLUDE CHARITY?

THE ETHICS OF CHARITY.

SIDE by side with a rich growth of charitable effort there has come into being in recent years, and on the part of certain social reformers, a jealous dislike to what is commonly known as philanthropy. Never have charitable moneys been so wisely administered, and such good results been obtained, as at the very moment when the question begins to be insistently asked: "Is Charity a permanent and wholesome ingredient in civilised life, or is it merely a necessary evil? Ought it to find an entrance into the ideal community towards which progress tends?"

It will not do to obscure the question with any side issues as to the abuses of charity. It is charity in its wisest manifestations to which exception is taken. Nor can the dispute regarding the blessings conferred by charity be confined to the mere question of raising funds. Under one aspect charity does, it is true, consist in grants by one section of the community out of their surplus goods for the benefit of another section. But under another and far more important aspect, charity consists in personal service, in unremunerative altruistic labours, and it is this aspect, fully as much as the other, which the modern reformer holds in disfavour.

Mr. Wells, who is one of the most eloquent exponents of the "Down with Charity" creed, carries it sturdily into action in his new Utopia. Here everyone is self-sufficient, everyone prospers and develops, so far as Nature has lent him gifts and so far as it would be possible to prosper in a house with windows constructed after Mr. Wells' new patent, and never to be opened.

Nobody is occupied in doing good to anybody else. The inevitable drunkards, thieves, and murderers are shut away from the community in islands reserved for persons of similar tastes, where they are at liberty to cut each other's throats or to earn a precarious existence by picking each other's pockets. The theory that an evil-doer can have any one by ties of kindred or compassion who cares for his disgrace and is willing to lend him a helping hand, is not entertained. Altruism in this Utopia flows in a common-sense channel, and confines itself strictly to establishing wholesome habits in the normal citizen.

THE REAL POINTS.

All this rests, of course, on the misleading assumption that mankind can be labelled definitely good, and bad, honest and dishonest, drunk and sober. It is comparatively easy both in morals and medicine to deal with the incurable. The crux of the whole matter in both spheres lies in the treatment of disease, and this is a matter in which the normal healthy citizen is not in the least interested. It will always be left for the altruist, whose sympathies have been developed till his own needs in his philosophy of life sink into the second place, to take thought for the weak, the suffering, and the morally defective. It is one of the healthiest signs of modern civilisation that this great field of altruistic labour, formerly abandoned almost without reserve to the private philanthropist, is being gradually reclaimed and tilled by the community. That the State should be called on to intervene in favour of the citizen who fails for any reason to be self-sufficient, points to the fact that the altruistic section of the community is in the ascendant. Moreover, this intervention is incontestable proof of the success of charitable effort, which must always in the first instance be purely experimental. So long as charity remains in the experimental stage, people are content to look

on—tolerant, but not hopeful. When success is assured, the community awakes to the perception that operations of vital importance are being carried on by private persons, and not unnaturally insists on assuming the direction of events.

This course has been followed in many notable instances. It is but a short time back that education was the subject of purely private benevolence. The treatment of the sick, the care of the insane, the instruction of the blind and defective, the support of orphan children, the isolation of the fever-stricken, the housing of the poor, the encouragement of thrift—these are only a few of the directions in which private effort has come to be supplemented, and in some cases superseded, by public bodies. All this is perfectly normal in a community which advances in prosperity. Even that it should be accompanied by a sense of jealousy on the part of the philanthropist is not surprising. It is the great working population, every day rising to sounder perceptions of citizenship, which forms at once the field of philanthropic effort and the source from which municipal power is drawn. This working population, including roughly all who earn their own living, whether by commerce, profession, or hand labour, is exposed, irrespective of class, to perpetual reverses of fortune. Their independence rests on the quaking foundation of a continuance of the normal state of their affairs, and in proportion as they feel their collective strength and individual weakness, they revolt against resorting in their need to outsiders.

STATE PHILANTHROPY.

It is necessary, however, for a right understanding of the proper place of philanthropy in the State, to recognise that, if the community is to deal worthily with the distresses of the needy, it must consist of a large majority of workers earning at least rather more than sufficient for their own pressing needs. In a struggling and very poor community taxing itself for the relief of its necessitous members, the tendency is for power to fall into the hands of men who regard the misfortunes of others as evidence of weakness or criminality, because they can see but one side of the question, and that is, the hardship of being compelled to pause in their strenuous pursuit of independence to give a hand to the laggards. Such views are readily adopted by a population barely able by dint of incessant self-denial to keep their own families from want. The help granted is whittled down till it is just insufficient; and in the history of our own Poor-law administration may be traced the result. Even where the votes of the indigent keep in power a party strongly favourable to their claims, as in Paris at this moment, funds will be lacking just in proportion to the extent of the demands upon them. A population living for the most part on the border line of destitution, is unable to bear a taxation which would suffice to maintain in high efficiency the institutions and agencies demanded in the interests of the wholly destitute. And so we find in democratic Paris, where the rights of the poor are watched with jealous care, hospitals falling into decay for want of funds, and Public Assistance strained to breaking-point in its effort to cope merely with the worst cases of distress.

To be continued.

MR. GAVIN D. MUIR, M.B., B.Ch., has been appointed Resident Medical Officer to the Royal Albert Hospital, Devonport.

CONGRESS ON SCHOOL HYGIENE.

THE second International Congress on School Hygiene, held at the University of London early in August, drew together about two thousand hygienists and educationists from almost every country of Europe. Among the subjects dealt with, the medical inspection of schools occupied a prominent place, a discussion on the subject being opened by Dr. Leslie Mackenzie, the medical inspector of the Local Government Board for Scotland. Dr. Mackenzie takes it for granted that the principle of medical inspection is accepted, and pointed out that it should be strictly practical, *i.e.* it should be limited to the health conditions which fit or unfit a child for school work, and should not include, except as an incident, details of merely scientific interest, such as anthropometrical and anthropological observations. He does not exclude, however, inquiry into the conditions of the home, if only for the information of the public health authority, which has a moderately complete control of the hygiene of the house. Dr. Méry, of Paris, who followed Dr. Mackenzie, includes the anthropometric examination among the necessary inquiries, in addition to the investigation of sight and hearing, and the general organic examination. Both gentlemen said that the assistance of the teacher is necessary for the satisfactory compilation of a health register, and Dr. Mackenzie said that he had found teachers thoroughly interested in the work.

A kindred subject is the co-ordination of doctor, nurse, and teacher in inspecting children at school. Here also the aid of the teacher is invoked, and Dr. Hayward, of Wimbledon, suggested that the teachers should keep a clinical thermometer in each class-room, and take the temperature of children whom they suspect of being ill, besides keeping a health record of their pupils. He also thinks that teachers should know the analysis of mental capacity, and the tests for this. Naturally he wishes that, to this end, teachers should be trained in hygiene. Dr. Forbes, of Cambridge, who dealt with the subject of the school nurse, wants to throw the greatest responsibility on her. He would allow pupils to be excluded from school on the nurse's diagnosis, and would even leave it to her to say when they should return after infectious illness. Mr. Sykes, of Bradford, a teacher of long experience, is rather sceptical about the advantages of the proposed medical inspection, basing his opinion on the facility with which the medical inspectors to the factories pass half-timers as fit for work—the average pass being about 98.6 per cent. of the candidates.

The papers read by several medical officers of health give proof, however, of a higher standard of professional rectitude than Mr. Sykes gives medical men credit for. Sir Shirley Murphy opened the proceedings of the section devoted to the consideration of infectious disease with a paper that showed the keenest appreciation of the need of medical supervision of even trivial cases of illness among school children. Both he and Dr. Niven, of Manchester, pointed out how often a great number of children might be seriously infected by a slight case, or even by a "carrier" who having no symptoms himself, had the power to infect susceptible persons. This would justify the exclusion of children from homes where there was infectious disease, and Dr. Niven pointed out that children suffering from diphtheritic rhinitis, post-scarlatinal or other, might be the cause of an outbreak of diphtheria without themselves suffering from the disease. Dr. F. J. Poynton, out-patient physician at the Children's Hospital in Great Ormond Street, spoke of the prevalence of rheumatism among children, with the consequent risk of heart-disease, and pleaded for the founding of convalescent homes where

rheumatic children might get thorough rest, and, failing that, for careful consideration in the school of these children, who are delicate and need careful management. He also spoke of the mischief done by neglected teeth, chronic ear discharges, and adenoids.

Dr. Newsholme, medical officer of health for Brighton, spoke of the disadvantages of children under five years of age attending schools, a subject on which he holds very strong views. He contends that not only do the children gain nothing by being sent to school at three years of age or a little over, when they would develop better either at home or at a crèche, but these very young children were peculiarly liable to infectious diseases; both the attack rate and the death rate from measles, whooping-cough, diphtheria, and scarlet fever are higher among children under five. Dr. Niven attributes the lesser fatality among elder children in part to immunity gained by previous attacks; but Dr. Newsholme points out that there is a great advantage to children in even postponing the age at which they are attacked by any of these diseases, for not only are they less likely to be fatal, but the postponement diminishes the likelihood of subsequent attack. As he reckons the cost of the education of infants at £1,749,711, and the intellectual result is admittedly not great, there would seem to be sufficient reason for making the postponement of school attendance to the age of five, which is now optional, compulsory, and for providing crèches where necessary.

Dr. N. Bishop Harman, oculist to the London County Council blind schools, gave some interesting statistics about blind children. He estimated that 37 per cent. of the total blind are blinded by purulent ophthalmia of the newly born, a cause which is in its nature accidental, and which from the greater care that is now being taken in the training of midwives and nurses, may be expected to diminish. As these children are otherwise normal, they can be successfully taught and may be made self-supporting, whereas children who are blind through congenital disease are often mentally defective. The most difficult class are the partially blind, including the highly myopic. These children cannot be taught in ordinary schools, owing to the defects of vision, but Dr. Harman does not think that blind schools, where, according to the scheduled curriculum, they must read and write Braille, are the right places for them. "The children learn it with ease, for they are of intelligence; but no sooner is the teacher's back turned than they bow down their heads to see what they must perforce read by feel." He suggests that they should learn to read and write like normal children, save that scrolls of large type should be used as lesson-books, and writing be learned with blackboard and chalk, free-arm fashion. Dr. Bronner, of Bradford, recommended that the so-called "conscience clause" in the Vaccination Acts should be abolished, and those who publish misleading statements on vaccination be punished. He dreads a return to the high percentage of blindness due to small-pox which characterised our country before the days of Jenner. He also advises that the eyes of all school children should be periodically examined by an expert, a record kept of cases of defective vision, and glasses insisted on, at the parents' expense when practicable, but where these are too poor, to be given free.

Dr. Stackler, of Paris, spoke of the usefulness of examining children for aural as well as ocular defects, so that the children might be placed in class according to their hearing capacity—the most defective nearest the teacher, and at the right or left side according as one ear or the other was most severely affected. Dr. Marion Hunter emphasised that it was necessary that the teeth also should receive attention in schools; while Drs. H. Meredith Richards and Winifred Thorpe dealt with the municipal control of ringworm. Among the many other subjects dealt with, ventilation and the training of teachers in hygiene were prominent, and the interchange of views among the doctors and teachers present should not fail to be useful.

NEWS AND COMING EVENTS.

THE Cottage Hospital at Fyvie, which has been completely overhauled, and to which a new wing has been added, was opened in the first week of August by Lady Leith of Fyvie.

It is proposed to enlarge and reconstruct the Weybridge Cottage Hospital. The scheme provides for fourteen beds altogether, and allows at a slight increase of cost for the development of four more. The total estimate is under £4,000.

At the last meeting of the Board of Managers of the Swansea Hospital it was announced that the working men's contributions to the hospital funds during the financial year amounted to £3,799 out of a total of £10,000, while house-to-house collections had yielded £459 odd.

THE Royal Westminster Ophthalmic Hospital, King William Street, W.C., has received a grant of £1,000 from the Trustees of the Zunz Bequest for the purpose of naming a ward, in perpetuity, the "Annie Zunz Ward."

THE new wing of the Royal Isle of Wight County Hospital was opened by H.R.H. Princess Henry of Battenberg early in the present month. The new buildings have been erected from designs of Mr. Thomas Cutler, the contractor being Mr. Henry Cawte, of Shirley Works, Southampton.

A NEW cottage hospital has been opened at Ramsey in the Isle of Man. The building consists of two wards, each of four beds and two cots, with two single bed wards, a nurses' room, store room and sanitary conveniences. Attached to these is a neat little surgery and operating room.

THE Visiting Committee of the Prescot Board of Guardians has recommended the erection of a new hospital for mental, epileptic, and infectious cases at Whiston Workhouse. After some discussion the Guardians decided to vote a sum of £9,000 to be expended in building and equipping an extension to the general hospital as recommended.

THE carnival recently held in aid of the Ilford Hospital has proved highly successful, it being estimated that the building fund of the hospital, which already amounts to over £2,000, will be augmented by £700 as the result of the collections. A special feature of the carnival was the excellent work done by the children, who, dressed as nurses, assiduously levied contributions from everyone.

A PHYSICIAN of Omaha, Nebraska, four years ago submitted his diploma to the Nebraska State Medical Board at Lincoln. The document was posted back to him by express, but never reached him, and as Harvard College refuses to issue duplicate diplomas, the doctor is suing the express company for damages to the amount of £5,000, claiming that the loss of his certificate will prevent him practising in any other State.

At a special general meeting of the managers of the Northern Infirmary at Inverness a letter was read from Dr. Mackay, of Inverness, offering a sum of £1,200 for the purpose of "equipping and maintaining the treatment of phthisis on modern lines." After discussion and report by the medical committee, it was decided to accept the offer, and to provide for the establishment of a consumption ward, either by extending the present west wing of the infirmary or by building a separate ward.

PRINCESS LOUISE, Duchess of Argyle, will open the new wing of the Leicester Infirmary on November 5 next.

At the annual meeting of the Clayton Hospital and Wakefield General Infirmary some interesting facts were disclosed with reference to the consumption of alcohol in the hospital. In 1874, when the infirmary had only 14 beds, the alcohol bill totalled £39 and the milk bill £45. Ten years later, with 34 beds, £53 was spent on alcohol and £165 on milk. Since then the patients have had far less alcohol, though their number has been progressively increasing, so that the milk bill for last year approached close to £300.

SCARE legislation is common enough in America, but even drastic temperance reformers will find the latest development of temperance legislation, as exemplified by the "Prohibition of the Sale of Alcoholic Beverages Act," which has just become law in Georgia, a trifle too aggressive. Under this Bill no intoxicating beverage of any kind can be legally sold in the State of Georgia after January 1, 1908. Druggists may only dispense prescriptions which contain alcohol upon a written order signed by a qualified practitioner. Such prescriptions must be made up immediately on the day they are written or upon the following day, and a special book, open to public inspection and somewhat on the lines of a poison book, must be kept by every druggist. It will be interesting to see how far this Act will modify intemperance in the State of Georgia.

THE BITTER CRY OF THE SUNDAYLESS.—The National Hygienic League, an organisation which has done pioneer service in the direction of securing a legalised six days' working week and equally good work in the suppression of juvenile smoking, has just issued a booklet, from the pen of Mr. T. Bowick, detailing the hardships of those who are unable to afford a Sunday's rest. Professor Sims Woodhead, in a few introductory remarks, urges the introduction of a Weekly Rest-day Bill, and the data given in pamphlet are sufficiently important to prove that such a measure will be warmly welcomed by a large section of the community. The importance of a weekly rest-day is gradually better appreciated. To some, it is true, the religious principle appears to be the predominant factor in influencing their approval of such rest, but it is safe to say that by far the larger majority look upon the subject purely from a practical point of view. Medical men would be the first to support such a measure as the National Hygienic League proposes. To them Sunday is often the hardest day in the week, simply because a certain class of patient prefers to be visited on that day. There are practitioners—and we are glad to say that the number of them is daily growing larger—who set their faces sternly against unnecessary Sunday calls, charging a slightly higher rate for Sunday visits; but the average practitioner feels in duty bound to make no difference between Sunday and week-day calls. We venture to think that if the profession generally made it clear that they, as well as tram drivers, City men, and railway employes, are in need of a breathing space after six days' strenuous labour, their patients would admit the reasonableness of this wish, and do their utmost to ensure its realisation. Urgent calls, of course, will always claim the doctor, but the percentages of urgent Sunday calls is relatively small, and the majority of visits that the "Sunday doctor" has to pay are needless. The general practitioner might do worse than bring Mr. Bowick's booklet to the notice of his patients.

NURSING ADMINISTRATION.

TRAINING IN POOR-LAW INFIRMARIES.

I.—ITS DRAWBACKS AND TRIUMPHS.

THE superintendence of nursing in Poor-law infirmaries is carried on under conditions which differentiate them in many important particulars from hospital work. The question as to whether good nurses can be trained under the system has been settled once and for all. A stream of highly trained and competent nurses has now begun to issue from the best Poor-law training schools, and so inadequate is the supply of well-trained nurses for the demand that the public would infallibly feel the pinch of necessity should this source of supply for any reason be checked. The more closely the Poor-law Infirmary can succeed in following the lines of the best hospital training for its nurses, the better prospect infirmary-trained nurses will have on completing their course, and as a natural consequence the better will be the class of women offering themselves for training in these establishments. The differences in organisation between the voluntary hospital and the rate-supported institution are partly inherent to these distinct branches of the public service, and partly accidental. Perfection in the training of nurses has not yet been attained in either class of institution, but it is generally recognised that the hospital has so far made greater progress in that direction than the infirmary. Hence, it is very important to consider in what particulars the Poor-law training is capable of expansion, and to what extent its limitations must be borne with as fixed, however they may be compensated by extra privileges.

The following points will occur to even a superficial observer as distinguishing the Poor-law from the voluntary hospital training school:—

1. The relatively small size of the staff compared with the number of beds.

2. The absence in most infirmaries of any extra staff to take special cases or relieve the regular staff for leave or holidays.

3. The small proportion of medical attention, two doctors commonly sufficing for institutions containing several hundred beds.

4. The large proportion of chronic cases.

5. Security of tenure in appointments leading to the practically immutable position of the sisters.

6. The absence of any power of dismissal on the part of the matron, even with obviously unsuitable probationers.

7. The total want of public interest displayed towards the institution.

8. Government by Guardians, the majority of whom have no sympathy with infirmary work, instead of by keenly interested governors, who are themselves subscribers.

9. An admirable system of superannuation and pension, putting a premium upon long service.

10. Complete absence of all financial strain.

All these points tell more or less in the training of probationers. The first four are commonly considered the most conspicuous features of the infirmary, but perhaps they affect the character of the

training less than the administrative details we have enumerated under the later headings. They alter the nature of the duties to be carried out, it is true, but then it has been shown over and over again that efficient nurses can be evolved from the most varied types of institution provided only that due care is taken to keep the balance of training even. Now this quality of evenly balanced training and experience is exactly what is achieved in the Poor-law system. The nurses may not see a great variety of work. Big surgical operations are comparatively rare and advanced obstetrical work, or obscure medical diseases may be seldom encountered. But such as the work is, and its character is more generally representative than is often understood by purely hospital trained nurses, the infirmary nurse gets her fair share of it all. She is not kept to one branch of nursing until she almost forgets there is any other. The large wards where medical and surgical cases are received without classification are each a hospital in themselves. The probationer is not confined to mere routine attendance on others. She is not cut off altogether from any practice in performing important nursing processes, because there are too many probationers in training to admit of all getting a fair chance. It is rather the other way. She is compelled to be self reliant by virtue of the very defects in organisation. If there is no holiday staff it follows that juniors get opportunities of showing their mettle. If there is little help to be looked for from the overworked medical officers there is all the more practice in dressings and bandaging, all the more need for precision and conciseness in preparing for the rapid visit. If there is less excitement in the interchange of patients, less interest in the presentment of disease, when many are incurable, there ought surely to be more human interest than is possible in the hurried atmosphere of the general hospital, where patients succeed one another too rapidly to leave much impression on the staff. And, lastly, though there may be less direct inspiration from medical zeal than is reflected upon nurses in general hospitals, there is often far more personal attention bestowed by the medical officers on details promoting the training of the nurses than is the case in hospital. The excellent results shown in tests by outside examiners are a proof that these advantages are having full effect on the standard of training. The Poor-law infirmaries do not brand their own herings.

The more serious drawbacks to infirmary nursing are gradually disappearing. Year by year the proportion of nurses to beds is decreasing, as the Guardians come to perceive the importance of securing a good class of nurse for infirmary work. If the position of the probationer in the smaller infirmaries and in the sick wards of workhouses is still a painful anomaly, it may be fairly claimed for the large London and Provincial infirmaries that the battle as regards training has been won.

THE COMMON TASK.

Correspondence and Queries for this section should be sent to the Editor of THE HOSPITAL, 23 Southampton Street, Strand, London, and marked "Nursing Administration."

THE SHORTAGE OF PROBATIONERS IN AMERICA.

There seems some reason to fear that women are being deterred from nursing in those States where Registration has been adopted, by the preliminary educational requirements, and by the examinations imposed before the certificates of registration are issued. Many women who can make a very good appearance when examined in their own school under familiar conditions flinch and fail when subjected to the ordeal of a public and formal examination whether written or *viva voce*, and some recoil from it altogether. It is certain that registration is not performing all the wonders it was warranted to achieve, and much may be learned by attentively watching the impediments to its progress which are being faced with undaunted courage by its advocates on the other side of the Atlantic. It seems as if the American nurse was becoming restive at the three years' course, and we are glad that this difficulty has at any rate so far not made itself felt in this country.

PETTY CASH.

The command of a little ready money often facilitates the housekeeper's economies to an extent "red tape" declines to recognise. For this reason the matron whose duties include the catering and the purchase of household necessities ought to be allowed the use of petty cash with which to seize opportunities. "Can nothing ever be bought cheap for a workhouse?" a matron was heard lately to complain. She needed some trifle, which she could have procured at small cost, but was compelled to apply for it under the regulated conditions, and when after long delay it had passed through the various stages which authorised its purchase the result was the most costly article of its kind which it was possible to procure. During the present glut of fruit in London the matron with the necessary means could make enough jam for the whole year at half the cost of the ordinary adulterated shop article, but in most institutions it would be unheard of for any deviation to take place from the usual course of buying from one regular dealer, at "institution prices."

THE ETHICS OF MATRONSHIP.

A useful little book on "Open Doors for Irish-women" has been issued by the Irish Bureau for the Employment of Women, and it is satisfactory to find that elaborate needlework no longer stands out as the principal if not the only source of income for the Irish lady debarred from living on her "rentes." Nursing plays a conspicuous part among the occupations recommended, and among the various branches of work we note, too, "Matronships of Institutions." Under this heading a few maxims are given, from which we quote the following:—"Never seem in a hurry, never decide hurriedly, and once decided never change." Now the very essence of superintendence is that the head is called

on all day long to decide "in a hurry," generally, it is true, about trifles, but often about more important things. She is compelled to train herself to be prompt, and however seemly it may be that she should "never seem in a hurry," she can no more help often having to work at top speed than she can insist upon being allowed to deliberate when some frequent emergency arises. Moreover, "once decided, never change," is at the root of that dense officialism from which in England we are more free than in the bureaucratic countries of Europe. Why, new facts may transpire, conditions swiftly be reversed, judgment, however deliberate, be at fault. There is no weakness so deadly as the weak obstinacy of the woman who is afraid of being thought weak.

COLONIAL NURSING ASSOCIATION.

IN no direction has central organisation proved more beneficial than in the spread of trained nursing along the outer borders of the Empire. Fifteen, or even ten, years ago the woman who ventured to take up work in Africa or in the East was adventurous or self-sacrificing in the extreme. Her fitness for the work was conjectural, her prospects undefined, her position on arrival ambiguous. Splendid pioneer work was done under conditions of the most adverse description, but the wastage of health and energy was discouraging even to those who saw most clearly the need for the trained nurse in districts where white men were in a small minority, and a prey to every kind of disease. All this has been altered in the course of a few years only by the Colonial Nursing Association. During the ten years of its existence the Association has sent out no fewer than 344 nurses for Government service and private work, and in each case the greatest care has been observed in selecting women of the right type, well trained, physically fit, and suited by temperament for the exceptional difficulties of the posts they have been called on to fill. Instead of going to unknown dangers the nurses of the Association are safeguarded right along the line. Favourable conditions as regards salary, leave, and passage money are secured to them by the action of the Association, proper quarters are engaged for them, and by working whenever possible through the medium of the Colonial Governments, their position is assured from the moment they set foot in their new sphere of work. An immense field of occupation has thus been thrown open, a field as yet but partially tilled, and capable of almost boundless development. The wisdom which has guided the counsels of the Association in steering a straight course through manifold perplexities of administration can be best appreciated by those acquainted with the regions for whom the nurses are required. It is gratifying to know that the matrons and nurses sent out under this admirable system are contributing in no small degree to the improvements now taking place in the hospitals throughout the Crown Colonies and Protectorates.

EDITOR'S LETTER-BOX.

[Our Correspondents are reminded that prolixity is a great bar to publication, and that brevity of style and conciseness of statement greatly facilitate early insertion.]

THE NEW ADVANCE AT THE INTERNATIONAL CONGRESS OF SCHOOL HYGIENE.

SIR,—As a slightly incorrect statement was published, it would be as well to explain in some detail the important new move in the matter of school hygiene which was taken at the closing meeting of the recent International Congress.

The permanent International Committee, consisting of about sixty members, selected from almost every country, has hitherto only met during Congresses. Arising out of the question of whether it would not be a proper thing to establish a bureau, with a permanent staff, library, and museum, and so on, in some central but neutral spot, such as a Swiss or Dutch town, it was decided, as explained by Drs. Mathieu, Burgerstein, and Kerr, that it would probably lead to greater progress if such bureau was not localised, but if each country had its own centre for the diffusion of knowledge, and to act as a clearing house in the matter of school hygiene statistics, laws, and regulations. Finally, to supervise in scientific matters, and generally to do all that is possible at all times or places to forward the human interests which are bound up in the special lines of knowledge included in school hygiene, the International Committee has formed a small Council.

This Council has all the powers of an ordinary committee. It can form sub-committees of experts on special inquiries. The usual committee procedure is to sit round a table and discuss matters, but this Council will deal with the various subjects that arise, submitting the different topics by correspondence, collating the answers, and finally making pronouncements in urgent matters after a meeting of the Council.

It is obvious that for efficiency such Council should be small, and yet have in it elements to secure permanence, and at the same time possibilities of slow but constant change. This has been done by deciding that it shall consist of the president of the past Congress, the president of the Congress which has just been held, and the president of the next Congress. Nine other members are to be elected, of whom three are to be from the country where the Congress was last held, and three from the country where it will be held next, three being selected from other lands.

Certain matters, for instance, will almost at once come under the consideration of this Council. Such might be quoted as :—

"The question of how medical inspection of schools can best be carried out with the maximum of efficiency and minimum of cost."

"The question of how far the laws of health can best be imparted to the coming generation, so that later they will

know how to care for themselves and those dependent on them."

"The best systems or methods of physical training for both sexes at various ages."

"The feeding of children requiring proper nutrition, so that it shall be done without developing pauperism and with regard to those upon whom the cost falls."

These four matters are being dealt with practically in a great variety of ways, and this Council should be able to collect and analyse known facts to show which methods are best for any town or State.

It is obvious that information thus digested will have a very great value politically as well as educationally, and this Council may in time come to be officially regarded as quite analogous in matters of school hygiene to that other Congress of Peace now in session at The Hague.

Yours faithfully,

LAUDER BRUNTON,
President.

JAMES KERR,
E. WHITE WALLIS,
Hon. General Secretaries.

General Practitioners' Contributions.

Important.

We propose to devote a special page to General Practitioners' Contributions. We therefore invite from practitioners contributions based upon their experience in the management of cases, and in the treatment and diagnosis of disease; especially shall we be prepared to welcome articles dealing, practically, with treatment, and with the use and value of new remedies and methods.

No article should exceed 1,100 words in length, and, if accepted, one guinea will be paid to the writer after publication. Each communication should be accompanied by a stamped directed envelope for the return of the MS. if found unsuitable.

The Relaxations of Medical Men.

We shall also be glad to pay for accepted contributions, from any member of the profession, on the subject of the relaxations of practitioners. This opens up a wide field, as it includes natural history, photography, sport, indoor recreations, and motoring. Whenever possible, original illustrations and photographs should be sent with the MS.

Suggestions Invited.

The Editor will welcome suggestions for the establishment of any new section in *THE HOSPITAL*, and will be glad to supply information on any subject of interest or importance to members of the profession in any part of the world.

Notices and Answers to Correspondence.

All MSS., letters, books for review, and other matters intended for the Editor, should be addressed to THE EDITOR, The Hospital Building, 28 and 29 Southampton Street, Strand, London, W.C.

THE HOSPITAL

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Name

Address

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SATURDAY, AUGUST 31, 1907.

THE CRISIS IN THE BRITISH MEDICAL ASSOCIATION.

EVENTS for some time past have been suggesting that a crisis in the position and development of the British Medical Association was imminent, and now, it would appear, the issue is fairly joined. Two of the controlling organisations within the scheme of the Association have directly challenged one another, and it rests with the individual members in their several constituencies to say which of the two shall be supreme. It is inevitable that the controversy must be an acute one, and a good deal of strong feeling and strong speaking may be expected. But it will, we hope, be recollected by the disputants that the one question of importance is the welfare of the Association with which they are connected, and that this welfare is impossible unless the Association commands the support and sympathy of the vast majority of the profession. An active and energetic minority might, it is conceivable, score an apparent victory, but such victory would certainly be short-lived. The majority of medical practitioners hardly concern themselves in any active sense with professional politics, but they will not be slow to express their resentment should any Association, professing to speak on their behalf, assume an attitude which they regard as unworthy of the highest traditions of the profession. This aspect of the coming struggle cannot be too strongly emphasised. In the last resort the general opinion of the whole profession will prevail, and unless the Association's policy is framed in accordance with this, very serious consequences will ensue. At present, the Association is the one organisation through which unity and common action in the profession are possible. It would, in our judgment, be a profound misfortune were anything to limit its capacity for usefulness. We therefore venture to urge on all its members the need for careful consideration of the issues which are now to be presented for their consideration, and the vital importance of the decision which rests in their hands.

The crucial question in the impending struggle is briefly this—whether the Council of the Association or the Representative meeting shall be the supreme and final authority. At the recent meeting at Exeter, the last-mentioned body came to certain decisions in

reference to the clauses of the proposed Royal Charter, and the resolutions embodying these decisions were submitted in due course to the Council. From certain of these resolutions the Council has now formally indicated its dissent, and has appealed to the Divisions to disapprove of the proposals of the Representative meeting. The Council has, in short, subjected these proposals to the Referendum, so that the issues involved must be fought out by the members of the Association as arranged in Divisions, and the ultimate decision must rest with the majority. The question, however, is whether the opinion of an absolute majority of the members will be obtained. Everyone must admit that this is desirable, or even essential, but will the existing machinery secure it? By that machinery the resolutions of the Representative meeting challenged by the Council will be submitted to the Divisions, and a special meeting of each of these will be summoned to consider them. But it is notorious that, at least in many of the Divisions, any such meeting secures but a scanty attendance, and a vote there taken may readily fail to represent the real opinion of the constituency. Of course, it may be said that members ought to attend, but the fact remains that they do not. Therefore, if the votes which are to determine the issue are to be solely those recorded in the Divisional meetings, there is a real risk that the true feeling of the profession will not be obtained. And this, as we have already pointed out, implies a position which is not free from danger to the Association. The desirable thing would be the substitution of voting papers issued to all members of the Association, instead of a restriction of the votes to those recorded in the Divisional meetings. In this way the result would be not only conclusive, but it would be relatively free from danger. No one could challenge the extent of the opportunity, and there would not be the risk of the Association formally adopting a position for which the moral support of the majority of its members did not exist. Whether the substitution of the voting paper for the Divisional meeting is within the bounds of the Constitution or not we cannot pretend to say, but that such substitution is desirable if the Association is to occupy a safe and confident position there can be little doubt. Certainly, in the last resort, the voice of the

majority must prevail. But let care be taken to see that the majority is a real and not an accidental one.

Concerning the merits of the issue to be submitted we have at present nothing to say. But the comments already applied to the mode of voting on the Referendum apply almost equally to the Representative meeting. The decisions of that meeting may be wise or unwise, but they are wanting in moral strength, owing to the fact that so few of the members of the Association take part in the election of the re-

presentatives. Such elections take place in the Divisional meetings, where so often, as already stated, the attendance of members is of the scantiest. How, for example, can a representative claim to speak for several hundred members when the actual votes recorded in his favour scarcely, perhaps, reach the dignity of double figures? We are not in the least criticising the decisions of the Representative meeting; but until the state of matters just mentioned is altered, these decisions have little claim to be the accredited voice of the Association.

HOSPITAL METHODS AT MELBOURNE.

To judge from an article which appeared in the *Melbourne Argus* of June 13, the methods adopted in the election of the medical and surgical staff of the Melbourne Hospital have special and peculiar qualities which may well claim attention. Whether they will also be deemed worthy of admiration is, however, another question. It appears that the honorary appointments to the staff are made for a term of four years, and that the holders of these appointments are eligible for re-election. But such re-election is by no means a formal and foregone conclusion. On the contrary, when the vacancies are declared, there is an entirely open field, and an active competition is promptly set in progress. The sole advantage extended to those candidates who present themselves for re-election is that the name of each such candidate appears on the list of applicants with an asterisk attached to it. Now we are very far from saying that the holders of hospital appointments may not at regular intervals be profitably subject to review. Hospital physicians and surgeons, like other mortals, are all the better for influences which remind them that their own personal interests and positions may be imperilled by an imperfect attention to official claims and responsibilities. Hence, provided the reviewing authorities are informed and impartial, we can see no objection to an arrangement which brings the work and efficiency of the several members of a hospital staff under periodical scrutiny. Whether the Melbourne methods satisfy these conditions our readers will judge when we have described them.

The commanding facts in the election are two in number. First, all the governors of the hospital are electors. Secondly, every person who pays £1 to the funds of the hospital becomes a governor for the year within which such payment is made. The inevitable results of such an arrangement are obvious. When an election approaches it is found that the number of the subscribers to the hospital funds becomes greatly increased. The personal friends of each of the candidates become in this way voters, with an opportunity to make their influence felt at the poll. From this, naturally, emerges all the recognised machinery necessary to

conduct what is practically a popular election. "Pocket governors" are created by scores or even hundreds. Rival committees conduct an active canvass for their several candidates. Election literature of the usual perfervid character makes its appearance. Vehicles to convey voters to the poll are chartered. And personal, sectarian, and numerous other forms of influence are set into active operation. Of course, all this costs money. In one such contest it is said a candidate who was defeated spent not less than £2,000, and it is exceptional for an applicant to escape with an outlay of less than £300; even those who seek re-election may be put to very considerable expense. Indeed, it has hitherto been the custom for the retiring staff to contribute each £50 or £100 to a common fund, and in this way to add some hundreds of "governors" for the purpose of the election, and each pledged to vote the "ticket."

We imagine that few persons who have any experience of hospital management will sympathise with the proceedings just described, and members of the medical profession must surely view them with profound dislike. In the first place, it is obvious that such a method of appointment must lead to the substitution of personal, or even of less desirable, considerations, for those which are really of importance—namely, professional efficiency and value. Again, the power of the purse is introduced into a contest where its note should never be heard. It is inevitable, too, that amidst an election so conducted professional reserve and dignity must frequently be seriously qualified. A competition downwards sets in, and *facilis descensus Averno*. More important than all, is it not obvious, that, in the circumstances described, the real and essential issues, that is, the efficient care of the patients, the successful conduct of clinical instruction, and the advance of professional knowledge, are apt only too readily to be altogether forgotten. We say nothing here of the practice of throwing hospital appointments open every few years to unguarded competition, though such a course has grave disadvantages. But we do most strongly deprecate a custom which commits the responsible choice of hospital physicians and surgeons to the tumult of a popular election in a manufactured and irresponsible constituency.

ANNOTATIONS.

The Prevention of Cardiac Valvular Disease.

DR. CATON, of Liverpool, has frequently urged his views on this question on the attention of the profession, and though the number of his professed disciples does not seem to increase, he continues his crusade with praiseworthy perseverance. It is almost impossible to exaggerate the amount of suffering and distress which are produced by cardiac valvular disease, and anything which affords a chance of reducing even a fractional part of this ought to be eagerly and steadily adopted. Dr. Caton's programme includes the diminution of pain and fever in acute rheumatism by the use of the salicyl compounds; absolute quiet and rest of mind and body, with sedatives, if necessary, to secure these ends; fairly full doses of potassium or sodium iodide to aid absorption of inflammatory products and to reduce blood pressure; and the use of small blisters over the upper four left intercostal spaces, by which means, he argues, it is possible to stimulate the trophic and vasomotor nerves of the heart without affecting the cardiac muscle. In addition he insists upon the necessity for rest, continued for six or eight weeks, or even for a still longer period. Another contribution to this subject has been made by Dr. C. O. Hawthorne, who points out that a large proportion of cardiac lesions occur in the early years of life, when rheumatism is common in its non-articular forms. These forms of the disease are not known to the public as "rheumatism," and hence the risk of heart disease and the necessity for rest during such apparently minor ailments are not recognised. Dr. Hawthorne, therefore, argues that it is the duty of any practitioner who discovers evidences of rheumatism in any family to warn the parents of the risks which are attached even to the slightest illnesses of their children. In this way, he contends, early rest might be secured, and thus a certain number of children might be saved from the disaster of organic heart disease.

The Debate on the Early Notification of Births Bill.

In our issue of July 6 we stated generally what we regarded as the attitude which the profession should adopt towards the provisions of this Bill. Briefly, we contended that the medical attendant was the private adviser of the patient, and that it was an invasion of that relationship, and, therefore, injurious to the public interest, to compel him to disclose information which he had gained in the discharge of his professional obligations. It is, we think, much to be regretted that the medical authorities who had an opportunity to present the case for the profession to the Government and to Parliament, did not insist on this position, but laid emphasis rather on the omission of any proposal to pay a notification fee. Even as it was the whole matter was bungled during the discussion in committee. The opposition of certain medical members of the House seems to have been bought off by an amendment exempting medical practitioners from the compulsory clauses of the Bill. Upon

the discussion of this amendment, however, so badly was the medical view of the matter presented that the sense of the House was obviously against the proposal. Speaker after speaker referred contemptuously to the demand of the doctors for a fee, and when one of the medical members urged that it was not the absence of a "fee," but the existence of a "penalty" for failing to notify, to which the profession objected, his remarks, not unnaturally, were received with scornful laughter. Only, so far as we have seen, in a single instance, was reference made to the principle that the private medical adviser of the patient ought not, in the general interest, to be compelled publicly to disclose professional confidences. In the end, the amendment, the acceptance of which had been made the price of the withdrawal of opposition to the advance of the Bill, was lost. So that those who claimed to voice the view of the profession to the House appeared both as Parliamentary bunglers and as the representatives of purely sordid interests. Medicine may well pray to be delivered from some of her friends.

Strychnine in "Tabloids."

A VERY important case was decided a few days ago by Mr. Mead at the West London Police Court. The question at issue was, whether an offence against the Pharmacy Act had been committed by the sale of "tabloids" of Easton's syrup without any entry of the sale, and without the signature of the purchaser, in the appropriate "Poisons Book" prescribed by the Act. The "tabloids," it was admitted, contained strychnine, and strychnine, according to law, must, when sold, not only be labelled "poison," but the sale must be registered as just described. It was also admitted that, in the instance in question, no such registration was made. In defence it was pleaded that such omission, while possibly constituting a technical offence, was in harmony with the general custom adopted by chemists and druggists throughout the country. Hence a merely nominal penalty was suggested as sufficient to meet the position. The magistrate, however, refused to accept this view. He held that a substantial contravention of the Act had taken place, and inflicted the full penalty of £5. If the custom of the trade was as stated, it was all the more important to emphasise the gravity of the offence. The objects of the special provision demanding the purchaser's signature were, first to impress on the purchaser the fact that the translation carried serious risks, and, secondly, to enable the purchaser to be traced should the poison be used for any illegitimate purpose. Behind the legal aspects of the case the question may be raised whether it is advisable to offer freely to the public powerful, and even poisonous, medicinal preparations in such an accessible and seductive form as compressed tablets. There is surely a lesson in the fact that the event which led to the above trial was the death of an infant after swallowing a number of "tabloids" set free by the accidental breaking of the bottle.

MEDICAL OPINION AND MOVEMENT.

WHETHER the great increase in cases of appendicitis is real and due to some factor of modern methods of feeding and living, or apparent only, and due to greater skill in diagnosis, still remains an interesting question for debate. Mr. Battle is fully convinced that there is a very real increase in the incidence of the disease, and has for some time set about to discover the cause, and now offers what appears to be at any rate a plausible solution of the problem. A considerable proportion of cases of appendicitis are associated with appendicular concretions. These concretions were supposed at one time to be "foreign bodies," but careful examination has shown that they are usually masses of fecal matter combined with inspissated mucus. At the same time, as Mr. Battle points out, these concretions are frequently formed around a foreign body as a nucleus, which may be quite minute. In a case of appendicitis operated upon by Mr. Battle, a concretion was found to contain a small irregular fragment of iron, and Mr. Battle suggests that minute particles of iron finding their way into the flour milled by fluted steel rollers may account for this increase in appendicitis.

It is not necessary that these particles should always form concretions in order to set up appendicitis. By contact with the mucous membrane they may cause abrasions, and by reflex muscular contraction due to the irritation set up they would probably be washed on again by the fluid contents of the bowel. The abrasion thus formed would give the bacteria their footing, and set up inflammation leading to fibrosis and stricture. Such is briefly the course of events pictured by Mr. Battle. He points out that the greater prevalence of appendicitis was first heard of in the United States, and only later when so much of our flour came from over the seas, and when our own stone mills could no longer be worked at a profit, was there any apparent increase of the disease in this country. Moreover, in America the increase in appendicitis occurred first in the towns where rolled flour was first used, then it spread to the villages, and finally to the negroes, when flour became so cheap that it was more profitable to buy it than to grind the corn at home. Should further investigation support this theory, it would become a question of public importance that proper methods should be adopted to secure the elimination of all iron particles from the flour.

THE discussion which took place at the recent meeting of the British Medical Association in the gynæcological section on the early diagnosis of carcinoma uteri deserves the careful consideration of all medical practitioners. In the opening address by Dr. Herbert Spencer it was pointed out that there was a greater mortality among women from cancer of the uterus than from malignant disease of any other part. This he attributed entirely to the fact that cases did not come into the hands of the surgeon at a sufficiently early stage. In spite of the pessimism of certain gynæcologists, he maintained that the successful results hitherto obtained

fully justified the belief that cancer of the uterus is as curable as the disease elsewhere, if only it was treated promptly as soon as it was recognisable. The speakers who followed fully concurred in the views expressed by Dr. Spencer, and it was generally agreed that the ignorance of women as to the significance of the usual symptoms of the disease, such as irregular discharges, was chiefly responsible for the present state of affairs. The general practitioner, however, did not escape criticism, and several instances were cited in which it was claimed that fatal delay had been caused by the medical attendant failing to realise the gravity of the condition. In any case the discussion should serve to kindle the whole profession to greater efforts in the early detection of the disease. The earnestness of the section on the question is shown by the resolution which was carried at the close of the discussion, to the effect that the Council of the British Medical Association should be requested to appoint a committee to consider the best means of disseminating knowledge of the importance of the early recognition of uterine cancer.

THE pathology and treatment of sleeping sickness have occupied such a prominent position in current medical literature that we need hardly apologise for again referring to the subject in these columns. In his most instructive Harben lectures Professor Ehrlich deals with his theory of atrepsy and atreptic immunity and its practical bearing on the treatment of trypanosomiasis with different chemical substances. These substances which have hitherto proved efficient in combating trypanosomic affections he divides into three groups: (1) Basic triphenylmethane dyes, (2) benzidine dyes, (3) arsenic compounds with (4) salts of mercury as adjuvants. By researches carried out with Drs. Röhl and Browning, Professor Ehrlich has found that by prolonged treatment of the host with any of these groups of chemicals it is possible to obtain strains of trypanosomes which are resistant to the particular group employed. Such resistance is specific for any particular group, extends to different substances of the same group, and persists through generations. He has cultivated his atoxyl-fast race through 125 generations without finding any decrease in its powers of resistance. These facts are of immense importance in regard to practical therapeutics. They suggest that a remedy may fail to effect a cure in any particular case after a certain length of treatment, but at the same time they show that the disease may be combated by combining several remedies. While a powerful trypanocidal remedy might fail to kill all the organisms present, even when administered in almost lethal doses, a combination with a weaker drug might effect an otherwise unattainable cure. Professor Ehrlich further points out that by using races of trypanosomes which have been rendered resistant to known remedies, it will be possible to establish new groups of trypanocidal substances. Such methods open up quite a new field of pharmacological research.

HOSPITAL CLINICS.

ABDOMINAL OPERATIONS.

A Consideration of Some Factors which Contribute to Their Success.

By J. H. DAUBER, M.A., M.B., B.Ch.(Oxon.), Gynæcologist to the Hospital for Women, Soho.

It is obvious that a surgeon who will only operate upon selected cases will, other things being equal, obtain better results than the man who operates upon each case as it comes. On this account it is difficult to compare operators one with another. One will accept risks which another will decline, and so mere statistics are of little value as a criterion of surgical merit. It is only by direct observation that a man's work can be judged.

Old people, in my experience, bear abdominal operations well, provided the duration of their performance is not too long. Cases of malignant disease stand in a class by themselves, and are always attended with greater risks. The mortality amongst them is proportionally much higher than in non-malignant cases. Operation upon them often has to be very free, involving all organs, glands, and tissues that have been actually or probably invaded by the cancer cells. The subjects of malignant disease are often aged and debilitated by pain and septic absorption. They therefore need especial care.

Most patients previous to operations are in a state of nervous tension and very impressionable. Therefore every influence about them should be optimistic. Nurses should refrain from discussing similar or any operations with their patients. All nurses in my experience forget that though speech is silvern, silence is golden. As little as possible of the preparations for operation should be subjected to the view of the patient.

The question of the best anæsthetic to be employed is too large to be entered into. If there is any suspicion of bronchial trouble I ask that chloroform may be used. That anæsthetic is generally to be preferred to which the anæsthetist is most accustomed, and it is well to give him a free hand. The surgeon has his own hands sufficiently full without concerning himself with the administration of the anæsthetic. It is important, however, to him that complete relaxation of the abdominal muscles should be maintained throughout.

Oral asepsis must, previous to operation, receive careful attention. Carious teeth and purulent gums are often productive of toxæmic symptoms, and parotitis and parotid abscess are not the least of the troubles that may be caused thereby. It may be necessary to requisition the services of a dentist, though patients often resent this with unusual vigour. At all events the nurses cannot be too assiduous in their endeavours to keep the buccal cavity in a clean and healthy condition.

Before operation the skin area prepared by compresses is, according to my view, not always large enough. The course of operations does not always run smooth. Emergencies arise, more handling of the patient becomes necessary than was anticipated—therefore let a large area be

prepared. The same applies to the preparation of the skin when the patient is actually on the operating table. I generally cleanse with (1) ether soap; (2) methylated spirit; and (3) 1 in 2,000 biniodide in spirit, using all three freely; groins, loins, lower ribs, and pubes being included.

Patients should not be kept too long in hospital before being operated upon. The tension of a week in the wards is often too much for them, and they leave the hospital unhappy and unoperated upon. On the other hand, no patient with an inflammatory condition in the pelvis should be operated upon—unless it is an urgency case—for a few days after admission.

I have noticed that patients are often subjected to too cold an atmosphere before entering the operating room. Continuous warmth is essential from the moment the patients leave their beds until their return. The anæsthetising room should be as warm as the theatre, and the operating table should contain hot water apparatus. It is a mistake, in my opinion, for patients to be returned into a general ward while intoxicated with the anæsthetic. To have a shouting, vomiting woman on one or both sides for some hours frightens and often completely upsets a nervous woman, quite unused to hospital life, and herself expecting to be operated upon in a day or two. I have seen this and have been vexed and pained by it. There should be a separate room for people coming round after operations; they should not be let loose upon a peaceful ward until quiet. But this room, or any room for the reception of patients after operation, must be warm. If warmth is essential before operation it is doubly so afterwards. Patients are often sent through draughty corridors, placed in cold lifts, or put in wards with open windows when suffering from the shock of operations. It is not always ether that is the cause of subsequent bronchitis. Remember, too, that the anæsthetising apparatus should be disinfected between each case. Death from septic bronchitis has sometimes resulted from neglect of this precaution. To maintain an equable warmth and obviate shock the practice of wrapping the patient in cotton wool, with the exception of the operation area, is excellent. I need not remind you that special warm wool surgical stockings are sold, and that every nurse knows how to make a pneumonia jacket. Cotton wool for thighs and arms may be useful in addition in severe cases. These warm things must not be parted with too hastily subsequently, but gradually discontinued. Patients like them moreover, and find them comforting. Before operation patients should never be allowed to get too "low." No one should be more than three and a half hours on an empty stomach while waiting for operation. Too often in hospital all the patients are prepared as if to be operated upon

simultaneously, whereas there may be a space of two, three, or even more hours between the first and last cases.

ASEPSIS.

With regard to the operation itself, I consider asepsis in every minute detail of superlative and paramount importance. Everyone who comes in contact with the patient should wear sterilised overalls. Boiled gloves are indispensable for nurses and assistants alike, as well as for the operator. In short, everything that can come near the patient should be sterilised, by heat if possible. From every point of view thermal agencies are preferable to chemical in effecting asepsis. For this reason I always use silk, or thread, or something that I can see boiled myself, in preference to catgut or other material that I may have to take on trust. Marine sponges are not to be thought of for this reason. Armlets of india-rubber should be worn by both operator and assistant. I have often seen the surgically unclean arm of either or both come into contact with instruments or ligatures, in spite of the wearing of gloves. The armlets should reach to the sterilised overalls.

In respect of asepsis one must for ever be on one's guard, and I have known men who have written volubly on asepsis commit unwittingly glaring mistakes. The older school seem quite incapable of assimilating modern doctrines into their practice. Nurses, too, are very weak in this direction. It is not an uncommon experience to go to a surgical home taking gloves with one for the chief nurses, and to find them subsequently, while still wearing their gloves, prepared to touch all and sundry articles, sterilised or unsterilised, such as taps, jugs, bedding, and the like; some of them think nothing of opening or shutting a door or window in them. All should remember that there is no more perishable article, in an aseptic sense, than one that has been sterilised. Almost "a breath can mar it." It will be said, "Oh yes, but all this is not necessary; excellent results can be and are obtained without all this fuss every day." To this I would reply, Many a cranky ship has crossed the Atlantic in safety times and again, but who of us would not prefer to make the voyage in a ship of the highest class, notwithstanding this fact? Our patients entrust their lives to us, and it is nothing less than treachery on our part if we betray that trust by carelessly neglecting to eliminate every possible risk.

DRAINAGE.

Details in operating I have not now the space to discuss. Personally, I very rarely employ drainage unless cutting down directly upon an abscess merely for that purpose. I have often left large areas of pyogenic membrane, that I could not remove, in the abdominal cavity without the slightest ill result—sometimes I have merely swabbed it carefully, at others copiously irrigated. "Clean well and close well" is my motto. In exploratory operations a fruitless incision in one place, and then another somewhere else, possibly with no result, is inartistic to say the least of it, if not dangerous, and says little for our diagnosis.

Large incisions are now the fashion, and rightly so. Sewing up the abdominal wall in its various layers has robbed ventral hernia of its terrors. We rarely see it except in some cases where drainage has been employed. The length of an incision is unimportant; it is as well to see as to feel what one is doing, and easier to work through a large hole than a small one. An incision that only admits two fingers generally has to be enlarged before what is necessary can be accomplished. Free incisions and the Trendelenburg position when necessary commend themselves to me.

Lightness of touch and gentleness are all important. Some excellent surgeons whose technique is perfect yet fail in obtaining the best results. Such often have strong, heavy hands, and use them with a strength that is detrimental to delicate tissues. It is the oft-handled bruised tissues that succumb to toxæmic attack, not the gently touched, briefly exposed, and unchilled.

LONG AND SHORT OPERATIONS.

If there is one thing I believe in it is rapidity in operating. A rapid operator can almost afford a little laxity in aseptic technique, though I say this under my breath. It is customary to say, "the rapid operating of Fergusson would be out of place to-day—with anaesthesia we can operate at our leisure." Not at all—every minute is of value now as it was then. Not a second should be lost from first to last. Be ready to make your incision the moment the anaesthetist gives the word. A harassing complication, such as one involving a resection of gut, may occur at any moment, when the man with time in hand will score heavily. Time is on the side of death, not on that of the surgeon. Every operation should be completed within an hour, if possible. At the end of that time I should like a bell to be tolled continuously, or other means taken to remind the operator that he was within the danger zone. I say this deliberately—most patients can stand an hour well, but after that every additional five minutes is fraught with more and more risk. If there is much hæmorrhage, then there is the more need for haste. A long operation with considerable hæmorrhage is a deadly risk to any patient, and to the old especially. After long operations every precaution must be taken to keep up warmth and the circulation. Hypodermic, rectal and saline injections all have their place. In my opinion direct intra-venous saline injections are unrivalled by other methods, but it needs a little skill and practice quickly to dissect out the vein and transfuse into it, whereas anyone can administer a rectal or sub-cutaneous injection.

Many assistants at an operation are so many additional sources of risk. At some general hospitals I have seen three or four dressers assisting the operator at an abdominal operation, in addition to the house surgeon, each one holding a retractor or forceps or other little tool, and between whiles not knowing where to put his hands—and we know from Dr. Watts who it is that "finds some mischief still for idle hands to do." This is not quite so bad as the dear old matron, the despair of a certain hospital staff, who, even when put into surgical gloves, would

shake hands in them if any old student of her acquaintance entered the theatre; after which she would go on with her office of handing swabs and bowls.

AFTER TREATMENT.

Now a word as to after treatment. Rectal injections of normal saline are invaluable for relieving thirst, and may be repeated *ad libitum* at all times. If vomiting is troublesome, or shock pronounced, nutrient enemata are excellent to supplement or assist oral feeding. Patients suffer much from thirst, and to withhold water is cruel and needless.

Everything has become much simplified of late years in the after treatment of these cases. Patients may be moved gently to a certain extent from side to side, and so spared that painful backache which otherwise is so distressing to them. A sixth of a grain of morphia hypodermically never does any harm, but more often it is not needed. Flatulent distension of the bowels is still the great trouble after coeliotomy. The rectal tube should be freely used in these cases, and purgatives and rectal injections must be resorted to unremittingly until the bowels act; after that patients may eat whatever they can.

POINTS ABOUT THE DIET.

I am quite convinced that not nearly enough attention is given to the culinary arrangements, either in hospitals or nursing homes. I have often been disgusted with the way in which the food is served to patients in hospitals. In the matter of surgical dressings and appliances, nothing is too good for them; but when it comes to the way in which their food is served to them, then it is another affair altogether. Some years ago I was staying a few weeks in one of the chief towns in the south of Spain, and visited the military hospital there. The commandant, a most courteous old colonel, showed me everything with the utmost kindness, but he explained to me that if I noticed many deficiencies it was because the Government would not supply them, and, moreover, the new methods had come in since his time, and he did

not mind them much; but what he did think was really important was that the patients should be *well fed*, and so I was taken to the kitchens and was made to taste all the dishes—the soup and the wine, etc.—and was asked my opinion of them. I pronounced them excellent, as undoubtedly they were. There are other things that make for success in surgery besides the latest type of steriliser. After operations, when convalescing, the appetites of patients want coaxing and tempting, no matter how low the social class to which they belong. How often is the food sent away because it is served untemptingly, the meat cut too thick, or cold, underdone or overdone, or generally unappetising! It is the same in a large percentage of the surgical homes. The commissariat is weak to the last degree, and the culinary art often almost unknown. Both the quality and quantity of the food supplied are inadequate, and complaints are heard on all sides. If, as Napoleon said, “a soldier marches on his belly” certainly a patient convalesces on nothing else.

A certain most excellent teacher of surgery was always reminding us as students, when speaking of fractures, that we must restore the function of a broken limb, and not be content with merely getting the ends to unite in good position. And so with abdominal work. Do not forget that to some an operation and the subsequent convalescence is a great ordeal, and taxes their powers exceedingly. It may be three to six months before they are able to resume their usual occupations. Our work is not merely an exalted form of human carpentry. Surgery does not consist alone of manipulative dexterity and operative skill. Judgment, based on knowledge and experience, is still the master quality in our equipment, and many side issues have to be considered and disposed of by us before our patients are completely restored to health.

All I have said has, I am aware, been said, and said better, before. I have doubtless omitted many essential facts, but I have endeavoured to emphasise some of the points which in my judgment are important in abdominal and pelvic operations.

OBSERVATIONS UPON INTRA-CRANIAL TUBERCULOSIS IN CHILDHOOD.

By WILLIAM P. S. BRANSON, M.D. M.R.C.P., Assistant Physician, East London Hospital for Children.

(Continued from page 551.)

I HAVE previously reviewed the principal features of the commonest variety of intra-cranial tuberculosis, namely, miliary tuberculous meningitis. It remains to deal with two rarer forms—caseating meningitis, and caseous tumour of the brain.

CASEATING MENINGITIS.

This lesion in its typical form is quite unusual, but presents a remarkable clinical picture which entitles it to separate consideration. It stands midway between miliary meningitis and caseous tumour, and partakes of the characters of both, for the lesion is a caseation of the meninges amounting

almost to a diffuse tumour. The vertex is the region principally affected, the meninges in this neighbourhood being the seat of a greenish deposit, most in evidence along the longitudinal fissure. This deposit dips into the sulci, and involves the brain-tissue to a considerable depth. The symptoms are well demonstrated by the following account of two illustrative cases.

I. A girl of four years, two days before her admission to the East London Hospital, while walking in the street complained that her knees were giving way. She was assisted home, was able to walk again by the evening, and on the following day appeared to be quite well. On the day of her admission, how-

ever, she suddenly began to scream, complaining of pain in the left arm and leg, which were observed to twitch for a few minutes. There was no loss of consciousness. She was brought to the hospital later in the day, presenting no paresis, nor any symptom of note except a slight anæmia. The next day, while walking in the ward, she cried out and stumbled. She was found to be conscious, but the left leg was rigid. This tonic phase lasted for about thirty seconds, and was followed by a clonic spasm of about two minutes' duration, which left the left leg weak, and abolished both the knee-jerk and the plantar reflex for a time. The left arm passed through a short phase of rigidity, unattended by clonus. Within five minutes she was able to stand, and later in the day was to all appearance well, and playing with her toys. During the next few days she underwent many similar seizures, which gradually became of longer duration, began to involve the face and neck on the opposite side, and were accompanied by an increasing irritability. At this stage there was no optic neuritis. On the eighteenth day of the illness the head became retracted, and on the twenty-fifth day the breathing irregular. She died on the twenty-sixth day, having been constipated throughout, but without having vomited once. Autopsy showed a greenish tuberculous deposit in the pia-arachnoid, situated on the vertex in the neighbourhood of the right Rolandic area and extending on to the marginal convolution.

II. A girl of eight years, having been out of sorts for three weeks, was attacked one day by a sensation of "pins and needles," which affected the whole of the right side, but was not associated with any loss of power. At this time she became constipated. Ten days later an attack of clonic spasm seized the right arm and leg, leaving the former weak and the latter useless. Nine days later again a recurrence of the spasm left her completely hemiplegic. At the time of her admission to the hospital, two days after the last seizure, she presented a right hemi-paresis with exaggerated reflexes. The plantar reflex was extensor on the right side, flexor on the left. There was no ocular paralysis, nor optic neuritis. Shortly after her admission she began to vomit, grew fretful, and gradually incoherent. On the thirtieth day from the onset of the formication the left leg became spastic, and control of the sphincters was lost. On the thirty-seventh day the vomiting abated, the patient being at this time semi-conscious. On the forty-first day strabismus was noted, and she died comatose on the forty-eighth day. Post-mortem examination showed a diffuse caseous deposit situated over the left Rolandic area and following the line of the longitudinal fissure. There was, in addition, a miliary meningitis of the base of the brain.

The lesion with which we are concerned is therefore characterised clinically by a relative chronicity quite foreign to the common type of tuberculous meningitis, whose duration seldom exceeds three weeks; the lesion is mainly vertical instead of basal, and the symptoms have a Jacksonian quality not met with in the miliary variety of meningitis. The point which deserves especial stress is that in the early stages of the malady the motor phenomena are quite

evanescent and give way to interludes of apparently perfect health, which may be very baffling to the diagnostician. In the absence of expert observation these Jacksonian seizures may easily be classed vaguely as "fits" and ascribed to epilepsy, with the result that the diagnosis is upset with embarrassing rapidity afterwards.

CASEOUS TUMOUR OF THE BRAIN.

Tuberculous masses form a large majority of brain-tumours in childhood. They may be single or multiple, and consist of a dense, greenish caseous substance which seldom shows any tendency to disintegrate. These collections occur most frequently in the cerebellum or about the region of the pons Varolii, but they may be found anywhere. They may be found after death in the brains of children who have shown no signs of such a lesion during life. Of twelve instances in which post-mortem examination revealed the presence of caseous tumour, six only gave signs during life of anything more than the terminal meningitis which commonly concludes the disease. This latency is especially frequent, as might be expected, in infants of very tender age, but is in the main dictated by the size and situation of the tumour.

There are few symptoms specific to tuberculous as compared with other tumours. Like the latter, they commonly give rise to the classical symptoms, headache, vomiting, and optic neuritis, leading not infrequently to complete blindness. They may involve the motor paths and lead to corresponding paralyses or pareses. When situated in the pons Varolii they may give rise to a condition of semicomatose by which the accompanying motor disabilities are disguised, the dullness depending upon internal hydrocephalus produced by blocking of the aqueduct of Sylvius. When situated in the cerebellum they produce the ataxia peculiar to lesions of that organ. But there are many silent regions of the brain in which such tumours may exist unsuspected for long periods. This chronicity and capacity for remaining in abeyance is the most specific thing about tuberculous tumours of the brain, as may be seen from the following examples. A girl of three and a half years was attacked by a left-sided convulsion which lasted for five hours. She appeared to recover and remained free from further convulsions, though in indifferent health, for fourteen months, when she died of tuberculous meningitis. Autopsy showed caseous tumours in the left temporal and left occipital lobes. Again, a girl of five years died after a long illness, as a result of caseous tumours in the right temporal lobe and in the left inferior cerebellar peduncle. The first sign of the disease had been a sudden attack of vomiting two years previously, followed almost immediately by a convulsive seizure chiefly involving the left side. The left hand remained slightly tremulous until the occurrence of similar convulsions three months later. These attacks recurred at intervals of some months, the last some ten months before her death. Such cases as these emphasise the potential gravity of "fits" in children, especially if these occur at an age at which convulsions apart from definite epilepsy are the reverse of common.

ILLUSTRATIVE CASES.

HYSTERIA.

THE following case is one which well illustrates the danger of diagnosing hysteria as the cause of symptoms in cases where an organic lesion cannot be excluded with absolute certainty.

Hysteria is a very easy diagnosis to make, but it is by no means easy to make it correctly. It is really only when every possible organic cause for the symptoms has been absolutely put out of court that hysteria should be diagnosed; it is a very unfortunate occurrence for the patient to die shortly after a diagnosis of hysteria has been made. It is too easy to jump to the conclusion that symptoms are purely functional, but in reality the jump is fraught with danger if it is made without due consideration; even when great care has been exercised there is sometimes a serious organic lesion when none whatever could be found to account for the symptoms. One of the very hardest diagnoses to make, probably, is that of "a perfectly healthy man," for it implies that every conceivable disease has been excluded; it is true that a very brief survey of the general appearances of a patient, an investigation of the physical signs, and an examination of the urine, enable one to form a very shrewd guess that the patient is perfectly sound, and the guess will again and again be right; this is so in examinations for life insurance, for example; but now and then people who have seemed quite healthy die within a year or two of diseases, such as tuberculosis, cirrhosis, or cerebral atheroma, which were actually in existence when the medical examination was made. Similarly, in the case of hysteria, one may turn out right time after time in calling the symptoms functional; but it is a thing to be chary of doing without good grounds. Cases of obscure abdominal pain, which may have been regarded for a while as neurotic, sometimes turn out to be due to abdominal aneurysm, which ruptures and causes death; weird pains in the chest may be called "pleurodynia," and in a few months the patient may be dead of a mediastinal growth; headaches may be regarded as trivial, or exaggerated by the patient and diagnosed as "cephalgia"; yet now and then they will be due to a cerebral abscess. There is no need to raise the patient's fears, or those of the friends, whenever there are symptoms which may have a grave cause; in almost all cases it would be very unwise indeed to do so; but at the same time there seems to be a considerable tendency, especially amongst house-physicians and newly-qualified men, to pooh-pooh the patient's story of subjective symptoms, and to diagnose hysteria as often as possible instead of as seldom as possible. There is a great tendency to treat people suffering from neuroses as though they were malingering, whereas hysteria and neuroses are diseases, in that patients suffering from them are ill, and that it is the duty of the doctor to try and make them well. All organs have both a structure and a function—an anatomy and a physiology; they are liable to disorders of either or both. Neuroses are disorders of physiological function without disorder of anatomical structure; they are very difficult indeed to treat successfully, and they

do not kill, and are therefore too often regarded as mere nuisances, which are best left alone. It is not, however, of this feature that we propose to give an example to-day, but rather to describe a case in which the diagnosis seemed to be neurosis, though the result proved it to be otherwise.

The patient was a well-developed, comely girl, aged 17, who came under observation for peculiar dyspnoea of a paroxysmal nature. She had been absolutely well until March 9, actively engaged in her work as a domestic servant, bright and happy as far as could be judged. She was not able to give any family history, for she was an orphan. She had lived healthily as far as was known. Suddenly on March 9 she had an attack of severe dyspnoea, without cyanosis, without stridor, without pain, without palpitations, without up and down movements of the larynx, but with a very rapid rate of respiration. She was quite sure that she had got no foreign body down the wrong way, and she herself could not account for the dyspnoea. She said she felt suffocated whilst the attack was on, and towards the end of it she had a little ineffectual cough. She was put to bed, and the paroxysm gradually passed off in about an hour. She got up again next day, and was at first able to work; but presently another precisely similar attack occurred, passing off when she went to bed; and the attacks repeated themselves as often as she got up, especially if people were watching her; when she was left quite alone she was able to move about like an ordinary person, free from dyspnoea, but whenever she knew she was watched a paroxysm came on with a noise that was not a true stridor, but was rather something between a wheeze and a groan at each respiratory effort. These attacks went on and on from March to August. The patient was examined carefully in all kinds of ways. The cardiac physical signs were perfectly normal. Nothing whatever could be found wrong with the lungs—during the paroxysms of dyspnoea there was a groaning sound heard all over the chest, and the expiratory part of the vesicular murmur was much prolonged, but equally so on both sides. The thyroid gland was apparently natural; there was nothing the matter with the urine; the larynx looked perfectly sound on laryngoscopic examination; there was no paresis of either cord, no structural deformity, no foreign body, no papilloma. The abdominal viscera were apparently natural. The knee jerks were exaggerated, but the rest of the nervous reflexes were normal.

The attacks were very similar to those sometimes seen in older patients with thoracic aneurysm or mediastinal new growth, so the chest was skia-graphed; absolutely no abnormality was seen with the x-rays. The blood examination for eosinophilia in support of a diagnosis of asthma was negative.

An enlargement of the thymus gland obstructing the bronchi was suggested as a possibility, and attempts to percuss out this gland were made without success; moreover, the dyspnoea was not influenced by the position of the patient; indeed, the attacks

came on much more frequently when she was vertical than when she was lying down, whereas a large thymus gland obstructs the bronchi most in the lying posture, because the sternum is then at its closest approximation to the bodies of the vertebræ behind.

Syphilitic stenosis of a bronchus was suggested, and anti-syphilitic treatment was persisted with for many weeks without the slightest benefit; there was not a sign of any syphilitic lesion elsewhere, the patient had lived all her life in respectable surroundings, and was only 17, so that, especially in view of the failure of anti-syphilitic remedies, syphilis seemed put out of court.

As no organic lesion seemed to fit the case, and as the girl did not lose flesh, and seemed strong, robust, and pretty, it was thought that the trouble must be functional. Except for the attacks of sudden dyspnoea, which sometimes lasted a whole day, sometimes much less, she felt and looked perfectly well. Sometimes she seemed a little better, sometimes a little worse, but upon the whole there was no obvious change either way from March to August. The attacks were always brought on when she was up and about and watched; they sometimes came on when she was watched in bed, or examined with the stethoscope; but if left to herself in bed she would

go for long times without an attack, though she always breathed rather more rapidly than normal persons do.

Towards the end of August she had one of her severe paroxysms of dyspnoea, with little or no cough; everyone expected it would pass off as the scores of others had done, but instead of that she suddenly became extremely cyanosed, and died asphyxiated.

At the autopsy there was a dense fibrous stenosis of the last inch of the trachea and the first inch of each of the bronchi, due almost certainly to a healed gummatous infiltration.

The reason why anti-syphilitic treatment had done no good was that the gummata had already been converted into irremovable fibrous tissue. The reason why there had been no very abnormal lung signs was that the lesion was symmetrical and bilateral, so that there was no means of obtaining a difference in vesicular murmur between the two sides of the chest; and the trouble had led neither to broncho-pneumonia nor to fibrosis of the lung with bronchiectasis.

There was no syphilitic lesion anywhere else in the body; indeed, except for the tracheal and bronchial stenosis, and for acute over-distension of the right side of the heart, all the viscera were normal.

AMBULATORY TYPHOID.

AMBULATORY typhoid fever is said to be very fatal, but it is clear that this is almost impossible of proof; a typhoid fever patient who never becomes ill enough to lie up in bed will not be diagnosed as typhoid fever at all; the commonest way for ambulatory typhoid to be recognised is by the patient dying, and the ulcerated ileum being found at the autopsy. It is clear that no one can say how many ambulatory cases have recovered, seeing that, being well enough to walk about all the time, they escape entirely from all statistics on the subject.

The fact that patients with typhoid fever may have no symptoms of it at all is well known. It emphasises the necessity for including enterica as a possibility in a great many obscure abdominal conditions that are atypical, and for not omitting to take serum for a Widal's test in other cases besides those in which the diagnosis of typhoid fever is fairly clear. The following is an instance of ambulatory typhoid:

A boy, aged 4½ years, was first regarded as ill two days before his death. Upon inquiry it was found that he had complained, a fortnight previously, of some "red places" on and below his knees, and of a little pain in his right ankle; he was kept in bed that day, but seemed nearly right the next. He continued well, and on the day but one before his death he ate a good dinner, and seemed to be in his usual health when put to bed. During that night, however, he began to have stomach-ache, was sick, and had some diarrhoea. The abdominal pain and vomiting persisted all night, and next morning there was a little blood with the stools. A doctor was sent for, and on arrival he found the patient pulseless, with dilated pupils, and short, shallow respirations.

Nothing abnormal in the way of physical signs could be detected. Saline infusion and stimulants were resorted to, but without benefit. The child lived till the next day, nearly moribund all the while, and finally died, without any diagnosis having been made.

At the autopsy there was nothing abnormal to notice about the exterior of the body. The spleen was not enlarged; nothing was wrong except in the bowel. The lower part of the ileum was acutely inflamed; its outer surface, beneath the peritoneal coat, was covered by many hæmorrhages; the cæcum and first two inches of the colon were similarly affected. The mesentery was thickened as if by inflammatory exudation, and the glands in it were swollen and pale. The ileum, when opened, was found to be the seat of numerous typical "typhoid" ulcers affecting the Peyer's patches; many of the latter which were not actually ulcerated were swollen and inflamed. There were altogether 33 ulcers in the ileum, and in the cæcum and ascending colon there were some follicular ulcers in addition to general enlargement of the lymphoid follicles. Between the ulcers the mucous membrane of both ileum and colon was acutely congested, suggesting that the terminal symptoms were due to an acute entero-colitis superimposed upon the latent typhoid ulceration.

The condition, it might be urged, was possibly some other form of bowel trouble than enterica; in order to check this, however, some heart-blood was kept, and serum from it was used for a Widal's test. The latter was completely positive, clumping occurring well within half an hour when the serum was diluted 1 in 200.

POINTS IN SURGERY.

CONGENITAL TALIPES EQUINO-VARUS.

II. TREATMENT.

THE objects of the surgeon in treating any case of talipes are to bring the foot into the normal position and to keep it there. Stress is laid upon the second of these points because it is the one which is more difficult of achievement. It is very rare to find in quite young infants that the deformity will not permit of reduction by manipulation; and this is an excellent reason for starting the treatment as soon after birth as possible. Even in those cases in which one or more tenotomies must be performed before the foot can be manipulated into the normal position, there is no reason to delay. Tenotomy may be quite justifiably performed in the first few weeks of extra-uterine life. In the first class of case, in which the deformity can be reduced without tenotomy, manipulation alone, if begun at once and patiently persevered with, will in all probability be sufficient to effect a cure. It is essential in practising the manipulation to bear in mind the double nature of the deformity which has to be overcome—(1) extension of the whole foot at the ankle joint, and (2) inversion of the anterior part of the foot at the mid-tarsal joint. The movements to be practised are naturally those which oppose these abnormal positions; thus the foot must be firmly everted and flexed at the ankle joint. The limb is steadied with one hand, while with the other the foot is firmly moved as far as it will go without causing the infant pain. It should be held in the new position for half a minute before it is released. It is well not to attempt to correct all the deformities in one movement, but to take them one at a time. For example, the foot should be flexed in this manner for five minutes and then everted for another five minutes. These manipulations should be performed at least three times a day. It is generally impossible for the practitioner to spare sufficient time to conduct the manipulations in person daily; but it is easy to instruct the mother, if she be intelligent, or at any rate the nurse, in the treatment by explaining the rationale of it and demonstrating the method at the outset. The movements must be gentle; if they are not, the pain will cause the infant to become fractious and intolerant of further treatment. In addition to this, massage may profitably be applied to the anterior tibial and peroneal groups of muscles to render them strong enough to hold the foot in the corrected position. This treatment should be persisted in for two or three months. If at the end of this time there is a noticeable improvement the amount of manipulation may be gradually reduced until the child begins to walk. If there is little or no improvement from manipulation alone, the effect of some apparatus to retain the foot in position between the manipulations should be tried. For this purpose nothing is so effective as a malleable metal splint. It consists of a foot-piece and leg-piece of thin metal united by a malleable curved bar of copper. The foot-piece and leg-piece are well padded, and when the splint is

applied to the limb the exercise of a moderate amount of force will suffice to bend the splint into the required position; the bar of copper is just so rigid that it will successfully resist the efforts of the foot to re-assume its deformed position. This splint is not expensive, is easy of application, and will fit one child as well as another. This line of treatment, if patiently persisted in, rarely fails; so that when the child begins to walk the foot is held in the normal position. But the patient must be watched so that the least sign of recurrence of the equino-varus position may be guarded against, and should this happen, treatment must be begun again. If a relapse occurs after the child has begun to walk, it is often sufficient to order a surgical boot which is so constructed that it will not allow inversion of the foot or extension at the ankle.

So far only these cases have been considered in which the deformity can be corrected by manipulation alone. In the second class of case, as already mentioned, complete reduction is rendered quite impossible by the contraction and shortening of the soft parts round the ankle; and here it is necessary to commence treatment with one or more tenotomies. Tenotomy in the neighbourhood of the ankle is done subcutaneously, because there is no risk of damaging important structures, and is quite a simple operation. A small incision is made at the edge of the resisting structure with a sharp tenotome. A blunt tenotome is now inserted by the side of the former, which is withdrawn. It is a matter of small moment whether the tendon is cut away from or towards the surface. In the former method there is more risk of injuring deep structures; the posterior tibial artery or its branches may be cut in dividing the tibialis posticus; but the hæmorrhage so caused is never serious, especially in an infant; and although the writer has seen this accident occur several times, the pressure of a pad and bandage has always been sufficient to arrest the bleeding. On the other hand, in cutting towards the surface it is a surprisingly easy thing to cut or button-hole the skin when the tendon suddenly gives way. The structures which must be divided in talipes equino-varus are the tibialis posticus, the tendo Achillis, and the plantar fascia; occasionally also the tibialis anticus and the flexor longus digitorum. Here again the dual nature of the deformity must be taken into account. Many surgeons divide all resistant structures simultaneously, or divide the tendo Achillis alone. As Mr. Tubby has pointed out, the moment the tendo Achillis is divided, it is almost impossible to correct the varus element completely, because the surgeon no longer has a *point d'appui* from which to apply his force. First, therefore, the structures which are holding the foot in a varus position should be divided, and when that half of the deformity is corrected, the equinus half can be dealt with by tenotomy of the tendo Achillis.

(To be continued.)

THE TREATMENT OF FRACTURES FROM A COMMON-SENSE POINT OF VIEW.

III. OPERATIVE TREATMENT.

IN last week's article the indications for mechanically fixing the fractured ends by wiring or by some similar manœuvre were briefly indicated. It may be added that such measures are undertaken either as a primary method of treatment or when the ordinary means of retaining the fragments in apposition have been tried but have failed. In the former case the operation should be undertaken as soon as the limb can be rendered aseptic. It is a matter of vital importance to obtain primary union after operations in which bone has been united by wire. The limb must be thoroughly cleaned with a scrubbing brush and ether soap, and then wrapped in gauze which has been soaked in a 1 in 2,000 solution of biniodide or perchloride of mercury. This dressing may be left on with advantage for 48 hours.

THE DANGERS OF WIRING.

The result of infection of these wounds is most disastrous. Periostitis is set up in the ends of the bone, and it is not uncommon to find that the portions of bone distal to the wire in each fragment separate from the shaft and come away as a sequestrum. An interval is thus left between the fragments, so that even if firm union is ultimately obtained, which is not always the case, there is bound to be an appreciable amount of shortening in the limb. It will therefore be readily understood that it is inadvisable to wire the fragments in compound fractures immediately after the accident, as is often done. It does not necessarily follow that because a fracture is compound the ends of the bone should be mechanically fixed. In the absence of one of the indications already mentioned, it is as easy to obtain a good result by using less radical methods. In compound fractures the wound is nearly always contaminated with organisms, either from the road on which the patient fell or from portions of his clothing; and if it is necessary to wire the fragments, it is better to wait for three days to make sure that the wound is aseptic before undertaking any such measures. In the case of a fracture of the patella, it is generally necessary to wire the fragments if a useful limb is to be obtained, since treatment by the older methods often leads to fibrous union and much loss of power in the limb; and here it is more than ever essential that strict asepsis should be observed. There is no more disastrous accident in surgery than septic infection of the knee-joint. The synovium, unlike the peritoneum, which has considerable bactericidal power, seems to have no resistance to pyogenic organisms; and the patient is likely to lose, in proportion to the severity of the infection, his power of movement at the joint or his limb, or even in bad cases, his life.

THE OPERATION.

The technique of the operation for wiring a fractured bone is comparatively simple. An incision is made in the axis of the limb over the site of the fracture, and this must be long enough to enable the sur-

geon to see exactly what he is doing. The muscles are then held apart and the ends of the bone exposed. Each end is drilled obliquely from without inwards by means of a bradawl or Archimedean drill. The bradawl is the simpler instrument, but the Archimedean drill saves much trouble and labour in the case of a compact bone like the tibia. The points to be observed in drilling the bone are (1) the periosteum at the end of the bone must not be damaged more than is absolutely necessary, lest a portion of bone deprived of its periosteal blood-supply should necrose; (2) the drill must be entered at some distance from the end of the fragment—roughly, from half an inch to an inch—or the bone is apt to split; (3) the holes must be drilled so that the points of exit of the drill shall be exactly opposite each other when the fragments are in apposition. A piece of silver wire is now introduced, from the periosteal to the medullary surface in one fragment and in the opposite direction in the other. While the fragments are held in apposition the wire is tightened up by twisting its extremities, and the twisted portion is hammered down flat along the surface of the bone. This method can be applied to nearly all fractures of long bones; but some surgeons advocate the use of silver screws to fasten the ends together in very oblique fractures, while others fix the ends in transverse fractures by means of aluminium plates which are nailed to the shaft of the bone above and below the site of fracture. The limb is put up in splints until union has taken place.

AFTER TREATMENT.

When a fractured limb has been fixed in a retentive apparatus it still demands constant attention if a good result is to be obtained. If it is merely left until the bone is united, it will be found that the muscles of the limb are much atrophied from disuse; and, especially if the site of fracture is in the neighbourhood of a joint, there may be limitation of the movements of that joint; and an appreciable length of time elapses before the patient recovers complete use of the limb. To obviate these disagreeable consequences massage and passive movements are invaluable. The tendency to-day is to make much earlier and much freer use of these manipulations than was formerly the case.

BOOKS RECEIVED.

J. AND A. CHURCHILL.

"Lessons in Disinfection and Sterilisation." 2nd edition By F. W. Andrewes, M.D.

SWAN, SONNENSCHNEIN AND CO.

"Beauty and Health in Youth and Old Age." By Mrs. John J. Webster.

JOHN MURRAY.

"Hygiene of Nerves and Mind in Health and Disease." By August Ford, M.D.

G. PULMAN AND SONS.

"Ophthalmia Neonatorum." By Sydney Stephenson, M.B.

SISLEY'S, LTD.

"The Wife, Her Book." By Haydn Brown, L.R.C.P.

GYNÆCOLOGY.

AFTER PAINS.

ABDOMINAL pain is not at all an uncommon symptom during the first two or three days after delivery. When the pain is continuous it is generally due to bruising of the abdominal parietes. In cases where it has been necessary to hold the uterus firmly and for some time after delivery it is quite easy to cause a certain amount of bruising of the peritoneum and other structures of the abdominal wall. Such a complication is particularly likely to arise in cases where the abdominal walls are resistant, and in cases of post-partum hæmorrhage, in which a good grasp of the uterus is half the battle. One may occasionally see the actual bruise on the abdominal wall a day or two after delivery, and anyone who has performed a moderate number of post-mortem examinations on women dying soon after confinement will probably have noticed small sub-peritoneal hæmorrhages over the lower portion of the anterior abdominal wall. The pain caused by such bruises is of a dull, aching nature, and is continuous. Any movement on the part of the patient tends to intensify the pain, but it can be relieved easily and quickly by applying warmth in the shape of a hot fomentation over the abdominal wall. Apart from actual bruising of the abdominal wall one may notice that the recti muscles seem to suffer from stiffness, and this also may be relieved by warmth.

Intestinal colic is another common source of pain. It is often accompanied by a rise of temperature, even as high as to 104° and some quickening of the pulse rate, and there are cases which present some abdominal rigidity like that of early peritonitis. Pressure with the warm hand on the abdomen enables one to make a diagnosis between the two immediately, since it relieves considerably the pain of colic, but intensifies that of peritonitis.

In addition to these common causes of abdominal pain we find a variety of pain known as after-pains. These are painful contractions of the uterus after the completion of labour. Now it must be remembered that the uterus is a hollow muscle like the heart, which spends its life in alternate periods of contraction and relaxation. For some hours, and even days, after delivery the contractions may be distinctly felt by holding the uterus in the hand. But in the normal case these post-partum contractions are not painful.

Clinically, after-pains are noticed more in multiparæ than in primiparæ. When a labour is long and the expulsive forces strong, as in primiparæ, they may be almost entirely absent. On the other hand, after an unusually rapid labour they may be severe and proportionately painful. It is said that primiparæ are particularly liable to suffer after-pains in cases where the uterus has been over-distended by hydramnios or by a very large child, but the author cannot bear this out from his own personal experience. The pains may last for the first twenty-four hours only, or in later pregnancies may be prolonged until the fourth day even, so that occasionally the patient learns to dread the after-pains more than the pains of actual labour. As a rule the pains are

unaccompanied by any rise in the temperature or pulse rate; it is only in very severe cases that there may be some accompanying fever.

The cause of after-pains is generally held to be the retention inside the uterus of pieces of placenta or membrane, and the formation of blood clot. The contractions by which the uterus endeavours to expel these foreign bodies give rise to the after-pains. Now this explanation does not serve in all cases. Pieces of placenta left behind in the uterus generally decompose and give rise to sapræmia. One has often seen large pieces of membrane and large blood clots expelled by the uterus during the puerperium without any pain whatever, in fact, without the patient knowing anything about it. The prevalence of after-pains among multiparæ is said to be due to the fact that in them the retraction of the uterus is not so complete as it is among primiparæ, and that therefore clots form inside the uterus, and give rise to after-pains during their expulsion. If this were true, as a general explanation, one would expect to find that the lochia in multiparæ were more profuse, but it is not so, and moreover in many of the most severe cases of after-pains nothing at all is expelled from the uterus. Therefore one cannot accept feeble retraction as the true explanation of after-pains.

In searching for the explanation of any symptom pathological anatomy is the first line of attack. What difference is there between the uterus of a multipara and the uterus of a primipara? The main difference is found in the structure of the uterine wall, for, whereas in the primipara it is smooth and practically homogeneous on section, in the multipara we find more fibrous tissue, and the arteries are thickened, hard, and prominent upon the surface of the section. Having already referred to the similarity between the heart and the uterus, we cannot refrain from pointing out that in cases where the coronary arteries of the heart undergo a sclerosis similar to that undergone by the uterine arteries after many pregnancies, the heart is liable to suffer from the spasmodic pains known as angina pectoris. Amyl nitrite relieves both pains. The nervous factor is, however, practically an unknown quantity in the problem of after-pains. All we can say is that women who suffer from spasmodic dysmenorrhœa are almost certain to have after-pains after delivery.

The treatment of after-pains is more successful if one works with the idea that after-pains are a species of cramp of the uterus. In a very few cases where retained blood clot is at the bottom of the trouble, ergot and hot douches may be successful. Hot douches are always useful in cases of bad after-pains, since the warmth acts as an antispasmodic. Drugs which relieve spasm are much the best to use in these cases. The specific for after-pains is antipyrin in ten-grain doses. The action of this drug is so efficacious in cases of after-pains that no other need be mentioned. It may be taken in cachets or in solution combined with a little spirits of chloroform and water. At the same time it is wise to relieve the bowels, and to place a hot-water bottle over the uterus.

LARYNGOLOGY AND RHINOLOGY.

THE DIAGNOSIS OF TUBERCULOUS LARYNGITIS.

Now that it is generally realised that tuberculous laryngitis is often curable by local and general measures, provided always that it be treated in an early stage, the routine laryngoscopic examination of consumptives and the early diagnosis of laryngeal tuberculosis have assumed great practical importance.

In most cases, where the question of diagnosis arises, it is already known that the patient is suffering from phthisis, but it also happens, and not very uncommonly, that the suspicion of tuberculosis is first aroused by the laryngoscopic appearance, and in such a case the general signs, such as the temperature and the sputum, together with the physical examination of the lungs, are of great value as corroborative evidence. But it must be remembered that all laryngeal lesions in a consumptive patient are not tuberculous. On the other hand, tuberculous laryngitis may occur in an early stage of phthisis when the physical signs are very indefinite, and in cases of advanced laryngeal disease the pulmonary signs are often masked to an extraordinary extent.

The idea that anæmia of the larynx is distinctive of tuberculous disease requires qualification; tuberculous ulcers are generally pale, and so are the large swollen arytenoids, but the unaffected parts of the larynx have no characteristic colour, and many of the lesions, especially on the cords and epiglottis, are of a deep red tint; pallor of the larynx depends on general anæmia, which is common, but by no means universal, in phthisis. When there is hoarseness, the character of the voice is of some value for diagnosis; it is a weak voice with little expiratory effort and quite different from the raucous voice of syphilis or the husky voice of a new growth. The tuberculous lesion may consist of infiltration or ulceration, and the latter has certain distinctive characters; the edge is extremely ill-defined and has no surrounding zone of injection, the base is set with pale granulations which are usually small and give to the ulcer a "speckly" appearance, but in the interarytenoid region they are apt to form large, soft, irregular masses; the ulcer rarely extends much in depth except in the neighbourhood of the vocal process, where it often involves the cartilage and forms by necrosis a huge cavity.

Though the entire organ is involved at a late stage, the lesions may begin at various parts of the larynx; Three common types may be distinguished in which the cords, the interarytenoid region, and the upper aperture are respectively involved.

(1) Tuberculous infection of the vocal cord may at first appear as a simple redness; swelling may be slight or quite extreme; in the latter case the site of opposition of the other cord is sometimes marked by a groove, and this cleft is very characteristic. The cord may be covered with granulations, which appearance is almost pathognomonic, and, as mentioned above, an ulcer is common at the vocal process and frequently extends into the cartilage. Catarrhal inflammation and syphilis are the diseases which most often imitate this chordal form of tuberculous laryng-

itis. When the lesion has produced no more than simple redness of both cords it is indistinguishable from catarrh, it can only be said that a catarrh which persists in spite of simple treatment and vocal rest must be regarded with suspicion; but marked redness confined to one cord is never due to catarrh, though it may be caused by tubercle, syphilis, epithelioma, or traumatism; a patchy congestion is in favour of tubercle rather than of simple catarrh, and ulceration does not occur in the latter affection. Syphilis attacks the anterior part of the glottis more often than tuberculosis; syphilitic ulcers have defined red edges and a smooth non-granular base; there is a greater tendency to scarring and the lesions are more widely distributed and tend to attack the fauces, palate, and pharynx. Epithelioma rarely imitates tuberculous disease of the vocal cord, although the converse occurs in certain cases where tuberculosis attacks the vocal cord of elderly individuals; but the differential diagnosis of these important cases will be more usefully discussed on a subsequent occasion, when epithelioma is under consideration.

(2) In the interarytenoid region tuberculous infiltration is often found; in the earliest stage it takes the form of a soft swelling of a peculiar velvety aspect; papillary excrescences are common and may reach a large size, ulceration often occurs, and is of diagnostic value, as other forms of ulcer are rare in this situation. This type has to be distinguished from the interarytenoid thickening which occurs in the pachydermatous form of chronic laryngitis; the latter is firm, regular, and symmetrical, and usually shows a central depression, whereas tuberculous interarytenoid infiltration is typically soft, translucent, and irregular.

(3) The form of tuberculosis affecting the upper aperture is in general easy of diagnosis; the arytenoids are usually attacked first, and the resulting smooth translucent pyriform swellings are almost pathognomonic. This swelling is nearly always bilateral, in cedematous laryngitis symmetrical swelling of the upper aperture occurs, but the affection is acute and differs from tuberculous laryngitis in its entire aspect. The cedema of arytenoid perichondritis is unilateral with complete fixation of the cord; a gumma of the arytenoid is likewise unilateral, firm and solid, and usually breaks down to form the typical deep "crateriform" ulcer; a malignant growth in this region is firm and hard, red and angry, it ulcerates early and resembles syphilis rather than tuberculosis, for tuberculous ulceration here occurs late and is seldom extensive. The epiglottis is rarely attacked by tuberculosis until the rest of the larynx is extensively affected; the infiltration is smooth and round, and ulceration occurs on the laryngeal aspect; the "turban-shaped" appearance of the tuberculous upper aperture is quite distinctive. Syphilis, on the contrary, often reaches the larynx from the fauces, attacks the epiglottis early, and produces marked ulceration which begins on the lingual aspect and frequently destroys the entire part.

OPHTHALMOLOGY.

THE DIAGNOSIS OF TRACHOMA.

CONSIDERABLE variety is seen in the onset and course of trachoma. Some cases are comparatively mild, others more or less severe. Four classes may be distinguished: first, "suspicious cases," in which a definite diagnosis cannot be made until the case has been under observation for some time; second, "mild cases," in which there is only a moderate hypertrophy of the conjunctival papillæ, no follicles in the tarsal conjunctiva, and only a few in the retrotarsal folds, and no secretion; third, "moderately severe cases," in which there is considerable swelling in the upper fornices, many follicles on both lids and in the tarsal conjunctiva, and more or less profuse secretion; fourth, "severe cases," in which sequelæ are evident, such as pannus, corneal ulcer, leucoma, anterior staphyloma, scarring, entropion, trichiasis, or xerophthalmos.

It is in the first two classes that there is greatest difficulty in making a diagnosis; in the other two the disease is more or less evident. In the initial stage trachoma is not infrequently overlooked or wrongly diagnosed, so it is most important to make a thorough and careful examination of the whole conjunctival sac. The lower lid is easily examined; the upper one should be well everted, and, if possible, a second eversion made, for it is clinically established that the formation of the trachomatous follicles is for a long time confined to the retrotarsal folds. The essential feature of all types of trachoma is the trachoma follicle. This first appears as a small greyish-yellow spot, about the size of a pin's head, in the deeper part of the conjunctiva, usually without any sign of inflammation. The small spot gradually develops into a round, projecting, large, and coarse follicle, grey or yellowish red in colour. Microscopically the trachoma granulation is essentially the same as the follicle of follicular conjunctivitis, but clinically the two diseases are distinct, though their differential diagnosis presents some difficulty. The chief points of difference are:—

Trachoma.

Occurs at all ages, but mostly in adults, and is seldom met with in the upper classes.

Caused by a specific virus, and, as far as is known at present, arises only through infection with the conjunctival discharge from a case of trachoma.

Follicular Conjunctivitis.

Mostly found in the young and of all classes.

A "folliculosis," or swelling of the conjunctival follicles, is produced by various irritants, such as dust, vitiated air, atropine or eserine. This renders the eye more liable to catarrhal infection, and may give rise to follicular conjunctivitis, especially when the general tone of the patient is low, but never to trachoma. Follicular swelling is sometimes associated with eye-strain and with simple catarrhal conjunctivitis.

The follicles seem to be on the conjunctiva rather than in it, and have no tendency to spread.

Trachoma.

They are found on both lids and on the tarsal conjunctiva.

They are round, large, and coarse, grey, or yellowish red, translucent, with ill-defined outline.

There is little or no regularity in their arrangement.

The conjunctival connective tissue becomes affected, and soon the conjunctiva loses its transparency, becomes thickened, congested, and rough, owing to the swelling of the papillæ, and frequently the retrotarsal folds become much hypertrophied.

The trachoma follicles ultimately undergo definite and characteristic changes, resulting in cicatrization with various sequelæ, as pannus, etc.

Follicular Conjunctivitis.

Usually confined to the lower lid, and never affect the tarsal conjunctiva.

Often horizontally oval, smaller, transparent, glassy appearance, with well-defined outline.

More regular.

Here the conjunctiva is never seriously affected, remaining transparent, smooth, and often not congested.

The follicles, after a longer or shorter period, disappear, and never lead to scarring, so leaving no permanent injury to the mucous membrane.

Cases of "acute trachoma" are rare; acute symptoms are oftenest due to the infection of an already trachomatous conjunctiva by some organism producing a muco-purulent or purulent conjunctivitis. In these cases the hypertrophy of the papillæ is so great that the trachoma bodies are obscured, and an accurate diagnosis is impossible until the acute symptoms have subsided. A bacteriological examination should be made. Trachoma is a very chronic disease, generally attacking both eyes, and there is frequently a long latent period without any marked subjective symptoms. Gradually the trachoma bodies give rise to more or less inflammatory reaction, with hypertrophy of the papillæ and purulent discharge. When trachoma has lasted some time the thickening of the conjunctiva or infiltration of the tarsus produces a very characteristic ptosis, which should prompt one to examine carefully the whole conjunctival sac. The diffuse infiltration of the adenoid tissue produces a gelatinous change in the conjunctiva, called "Stellwag's brawny oedema"; when this occurs it is a very definite diagnostic feature.

In the later stages the diagnosis is much easier, and is absolutely certain when the conjunctiva becomes gelatinous, with pannus and scarring supervening. Typical pannus is strong evidence of trachoma, but is not a constant symptom. A somewhat similar condition of the cornea is seen in phlyctenular affections of the cornea and in scrofulous marginal keratitis. These conditions begin in various parts of the cornea, and there are no granulations and no scars in the conjunctiva; under general and local treatment they rapidly improve.

Trachoma pannus almost invariably begins as a crescent at the upper margin of the cornea, spreading gradually towards the centre. When a few misdirected cilia rub on the cornea a superficial change is produced resembling mild pannus; a large healing vascular ulcer presents sometimes a somewhat

Trachoma follicles lie deep in the tissues, and are frequently confluent.

similar picture. Careful examination of the everted lid should establish a diagnosis. Scarring is an important sign of trachoma. This produces a symblepharon posterius, or a shortening of the retrotarsal folds, and incurving of the upper tarsus, going on to produce entropion and trichiasis.

Scarring of the conjunctiva is also produced by mechanical and chemical injuries; then it is usually unilateral. Cicatrisation also follows diphtheritic and gonorrhœal conjunctivitis, and pemphigus: in these there is no pannus, and the history is an aid to the diagnosis.

PRACTICAL NOTES ON DIAGNOSIS AND TREATMENT.

Nose Worry.

PEOPLE nowadays of all classes, rich and poor alike, think and worry more over their noses than they did twenty years ago.—*Mr. Stephen Paget.*

Chorea.

IN severe cases of chorea there is often much wasting, and liberal feeding is an essential part of the treatment. In many cases, too, the free use of brandy is advisable.

Iodine as a Test for Bile.

A DILUTE tincture of iodine floated on the surface of the urine is a convenient test for bile pigment. A positive result is indicated by a green ring at the line of contact.

Icterus in Enteric Fever.

JAUNDICE is a rare complication of enteric fever. When observed it has usually been in the later stages of the disease. It increases the gravity of the prognosis.

Uranium Nitrate in Glycosuria.

DR. C. H. BOND supports Dr. West's conclusions as to the value of uranium nitrate in glycosuria. He prescribes the drug in doses of three grains gradually increased. The dose is given twice daily after food, and never in less than an ounce of water.

Otitis from Influenza.

IN some of the influenza epidemics otitis has been a frequent complication. In most instances there has been nothing more than a catarrhal inflammation of the middle ear, but in others suppuration has ensued. Severe otalgia and even nerve deafness have also been observed.

Diabetic Coma.

PROFESSOR THOS. OLIVER has recorded a case of this condition successfully treated by saline transfusion. Two and a-half pints of saline fluid (1 dram of chloride of sodium to a pint of boiled distilled water) at 112° F. were introduced into the median basilic vein. The patient regained consciousness during the operation, and four weeks later there had been no relapse.

Treatment in Perforation of the Stomach.

THE immediate treatment is to keep the patient in the horizontal position, and to give opium to relieve the pain and brandy to combat the collapse. But the opium should be used in the form of morphine and by hypodermic injection, and the brandy should be given per rectum, because we need particularly to avoid putting anything into the stomach lest the amount of extravasation into the peritoneal cavity be increased. It is essential to keep the stomach empty, whether you are going to operate or not.—*Mr. Gilbert Barling.*

Lumbago.

THE application of an ice-bag will sometimes cut short an attack of lumbago.

Enlarged Glands.

AN ointment of biniodide of mercury, with iodide of sodium, in vaseline, acts well in reducing chronically enlarged glands or an enlarged thyroid.

Oxygen in Morphine Poisoning.

IN cases of morphine poisoning where there is failure of respiration and marked cyanosis the inhalation of oxygen in association with atropine and strychnine, used hypodermically, has on several occasions proved of distinct service.

Addison's Disease.

THOUGH the results are neither so certain nor so impressive as in the case of thyroid extract in myxœdema, there is good reason to prescribe supra-renal extract in Addison's disease. In a certain number of instances decided benefit has followed this practice.

Puerperal Sepsis.

IN addition to any local measures that may be necessary Dr. Mundé recommends the use of anti-streptococcic serum. He found it successful in three desperate cases where other treatment had failed. From three to six injections were given at intervals of from four to twelve hours.

Creosote in Tuberculosis.

IN pulmonary tuberculosis creosote is valuable, but it is not a specific. The purest beech creosote should be ordered, and should be given in capsules after food. The dose may be increased to 10 or 15 minims thrice daily. In some cases guaiacol is more readily borne by the stomach.

Mediastinal Tumour.

LARYNGEAL symptoms may be the first evidence of mediastinal tumour—aneurysmal or otherwise. The cough is characteristic. Its chief features are hoarseness and imperfection. Sir Wm. Gairdner long ago taught the importance of "imperfect" cough; he was familiar with its meaning many years prior to the introduction of the laryngoscope.

Splints in Colles's Fracture.

MR. JONATHAN HUTCHINSON says nineteen-twentieths of the cases will do well, and stiffening of the wrist and fingers will be avoided, if the wrist is merely placed between two cushion pads for a fortnight. Only when there is displacement of the carpal fragment which can be removed by extension, and which returns when extension is remitted, should splints be applied. If the routine use of splints were abandoned it would be greatly to the advantage of patients.

NOTES ON CURRENT NEUROLOGY.

By PURVES STEWART, M.D., F.R.C.P.

NEURASTHENIA.

In neurasthenia proper, distinguished from psychasthenia, we have, as Raymond has recently emphasised,* a depression of the whole nervous system, consisting of "irritable feebleness," together with asthenia of all the nervous functions, psychical, sensory, motor, vaso-motor, and trophic. The symptoms of neurasthenia are therefore multiple. They are mainly subjective, though certain objective signs can also be recognised. Charcot long ago pointed out certain neurasthenic "stigmata," some of which are of major importance—*e.g.*, insomnia, headache, neuro-muscular asthenia, spinal pain, gastro-intestinal dyspepsia, mental depression, etc., whilst others are secondary and less constant, such as vertigo, asthenopia, affections of hearing, sensory disturbances, and various circulatory, respiratory, vaso-motor and genital disorders.

The mental state of the neurasthenic patient is one of psychical depression, characterised chiefly by rapid fatigue and feebleness of attention, so that sustained mental effort becomes impossible. Memory, however, is not weakened; but the patient's intellectual activity is diminished, he becomes excessively emotional, loses his normal stoicism and self-control, and develops vague fears and apprehensions. But a point of primary importance, which marks off neurasthenia from psychasthenia and from hysteria, is that there is no perversion of the patient's powers of judgment.

True neurasthenia is not a primary disease. It is the result of something else. The commonest antecedent is over-stress, physical or mental, especially the latter. Accessory causes may also be present—for example, exogenous poisons like morphia, cocaine, tobacco, alcohol, lead; or endogenous toxins such as the sequelæ of infective diseases, especially influenza, malaria, enteric fever, and so on; or poisons actually produced within the body—

as by gout and diabetes. Neurasthenia may also be the result of various organic diseases, not only of the nervous system (tabes, disseminated sclerosis, etc.), but also of other systems, as, for example, chronic rheumatism, arterio-sclerosis, the various viscero-ptoses, etc. Lastly, traumatism, as in railway and other accidents, is a well-recognised cause of neurasthenia.

It is possible for neurasthenia to develop in a previously healthy individual as a result of over-strain, mental or physical. But we should note that there is a type of individual who is specially prone to neurasthenia—for example, the "arthritic" type of French writers—whilst on the other hand some individuals, not necessarily of stronger physique, are particularly resistant, and even though subjected to severe strain or to grave organic diseases, such individuals have a coefficient of nervous resistance so high that they do not become neurasthenic.

Clinically, for purposes of treatment, neurasthenic patients can be divided into two classes—namely, those with increased arterial tension and those with vascular hypo-tension. The neurasthenia accompanied by hyper-tension, according to Fleury, is generally the result of some intoxication. In such cases treatment should be directed towards eliminating the toxin by diuretic and laxative drugs, by light diet, encouraging cutaneous elimination by means of baths, exercises, massage, etc. On the other hand, when arterial hypo-tension is present, we must endeavour to augment the nervous energy by specially nourishing diet, by stimulating baths and douches, by massage and electricity. In both classes of cases we must at the same time soothe the patient's nervous irritability and depression by moral treatment—psycho-therapeutics, a factor whose importance cannot be overestimated.

* Bulletin Medical. March 20, 1907.

EPIDEMIC CEREBRO-SPINAL MENINGITIS:

Vaccine Treatment.

A most remarkable recovery from cerebro-spinal meningitis hitherto observed has been recorded by a group of Liverpool observers—Rundle, Mottram, Orr, and Williams.* In their case the specific organism was isolated from the cerebro-spinal fluid, a vaccine was prepared from this organism and inoculated at intervals varying from five days up to eight days, five inoculations being given in all. The result was brilliant; the child, who had all the evidences of progressive cerebro-spinal meningitis, and who, prior to the inoculations, was going steadily from bad to worse, made a complete recovery. Improvement did not manifest itself until forty-eight hours after the first inoculation. Then the rigidity began to relax. After each inoculation the temperature fell to normal, and remained down for increasing periods after successive inoculations, the other signs of the disease meanwhile diminishing and ultimately clearing up completely. The mode of preparation of the

vaccine is described by the authors as follows: "A twenty-four hours old culture was inoculated into sterile normal saline solution and placed in a water-bath at 60° C. for half an hour; agar tubes were inoculated from it, and incubated over-night to test sterility. The number of cocci contained was estimated by mixing known volumes of washed normal blood and vaccine; these were then diluted with normal saline solution, films prepared at once and stained by Leishman's method. The number of organisms present was counted against the red blood-corpuscles. The vaccine was freshly prepared for each of the first four doses; the fifth had been made seven days before use. No local reaction was observed after any of the injections." On each occasion the opsonic index was found to rise after the inoculation, and generally to a very remarkable extent.

* Lancet, July 27, 1907, p. 220.

THE BOOK WORLD OF MEDICINE AND SCIENCE.

THE OPERATIONS OF GENERAL PRACTICE. By EDWARD M. CORNER and H. IRVING PINCHES. Oxford Medical Publications. (London: Henry Frowde, Hodder and Stoughton, 1907).

THIS must have been a difficult book to write. Its first readers, the publishers, have given their testimony by issuing it on good paper, which will stand much handling, and in a type which adds to the pleasure of reading it. The table of contents is well arranged, and the Index is copious and complete; about 170 excellent diagrams illustrate the text. The keynote of the book is contained in the chapter entitled "General" surgical cleanliness. This is the factor which is responsible for the admission of the general practitioner into the realm of general surgery. From first to last, in well-considered detail, this principle is kept in view, and once mastered the authors insist that it is not so much the question of operation as the question of policy which must determine a man's professional action. In proof of this there is much of common knowledge, much of information which most men might skim over were it not presented in such a happy form; but in this book no one will fail to be charmed by the side-lights which shine even upon common things. The criticism of common faults is neither irritating nor vexatious, and it deals admirably with the avoidable causes of failure. Mr. Arbuthnot Lane would be satisfied at the supersession of fingers by instruments—an evolution which marks the progress of aseptic surgery, and is more needful to the general practitioner than to the pure surgeon. The system by which knives may be sterilised by pure carbolic acid is not original, but is a valuable one to the man who lives far from his instrument-maker; by it the edge of the knife is not destroyed, and maintains its character as a cutting instrument. In the same association it would have been welcome to have had a short chapter on the making of incisions. It is not always the blunted knife which is responsible for the mincing incision, with serrated edges, which one sometimes sees, and which throws the general practitioner into contrast with the skilled operating surgeon. On the other hand, the caution never to use the handle of the knife as a dissector is clear and intelligible. A valuable chapter on anaesthetics precedes eleven chapters which deal with interference arranged under regional headings. The contents of these chapters describe operations of greater or less severity. The practitioner in selecting from among them such as are within his scope will be guided by his personal experience, for the book will appeal to varying classes of men, but no one, after reading the detail and cautions given, will have other than himself to blame if he unwisely ventures upon ground which is beyond his sphere. The authors have avoided all dictatorial character in their discussion of the subjects in the most marvellous way; they never transgress the bounds of fact and logical deduction. The chapter on the examination of the throat is specially good, but we miss the suggestion that, in adult patients, the soft palate may be perceptibly raised by causing the patient to focus his eyes on the face of the surgeon. Hernia is a subject of great interest to the general practitioner, and the method of dealing with the inguinal form is thoroughly described. But the call is often urgent, and when the practitioner has relieved a strangulation, the ligature and removal of the sac with a few stitches at the inguinal rings is a good termination for those who shrink from the major operation. Similarly, in dealing with varicose veins, it is suggested that Trendelenburg's operation is best combined with local removal of veins. The advantage claimed by Mr. Pearce Gould, when

he introduced Trendelenburg's operation to English readers some five years since, was the small incision and the rapid recovery, but we must admit that when the veins are much enlarged they are better removed; while the ligature of the saphena gives a better result in the treatment of the small dark-coloured veins which lead to ulceration of the leg. We can find no fault in the remarks upon the treatment of stitch sinus as a "counsel of perfection"; but it lacks consideration from the standpoint of the general practitioner, who has sometimes to treat the condition left by the operation of another person. The patient frequently refuses, from the standpoint of expense, to go back to the operator, and with an altered anatomy re-opening the wound is not free from danger. It frequently suffices to plug the sinus with gauze in the form of a pyramid with its apex downwards, removing the gauze and syringing the sinus daily with a solution of phenol. When a few days have elapsed the stitch may be caught with a hooked probe, or, better still, with a small instrument figured some years since by Mr. Watson Cheyne. A cone of salicylic wool, left in for a day, will destroy the granulation layer of the sinus as deeply as it is septic, and healing immediately follows. Bier's treatment of septic inflammation of the limbs by passive congestion is favourably noticed, but we would rather advise it as a means of drenching the part with a home-made antitoxic serum, than as a matter of policy in the stage of weariness when "nothing is done." An after-incision is not a mark of failure any more than the swabbing of a throat after an injection of antidiphtheritic serum. The concluding chapter is occupied with preparation for operations by arrangement and in emergency. Perhaps too great a portion of it is a recapitulation of a preceding chapter on anaesthetics. This matter, as well as that on after-care, and the treatment of surgical shock would be more conveniently found in chapters I. and II. In preparation for emergencies most practitioners keep a bag, containing instruments frequently required, in such a state of purification as will permit of their being readily sterilised. Some indication of a formula of contents from the authors of this book would have been valuable. It is also convenient, in the rush of practice, to have a list of instruments useful in the more common operations; many men keep such lists, and add to, or curtail them as experience dictates. Here again the authors might have filled a page or two with useful hints.

The work is one for the consulting-room table of the busy practitioner. It will neither replace the larger text-book, nor the consultant, but it is a good index to both, and is certain of a hearty welcome from every earnest practitioner.

"PLASTER OF PARIS, AND HOW TO USE IT." By MARTIN W. WARE, M.D. (New York: Surgery Publishing Company. Pp. 88.)

INTO this little treatise Dr. Ware has gathered much information on a subject which is apt to be neglected in the present day, when surgery is sometimes under the tyranny of the knife. Dr. Ware commences with a general consideration of the plaster-of-Paris bandage, mentioning the best kind of plaster to use and the best kind of bandage with which to use it; he also details the method by which the plaster and the bandage should be incorporated. He then describes the methods of applying the materials in the treatment of individual fractures, and concludes with concise accounts of the use of plaster of Paris in orthopaedic surgery and in dental surgery. The descriptions are lucid and are accompanied by numerous and excellent illustrations.

DISEASES OF CHILDREN.

MYOCARDITIS.

At the provincial meeting of the Society for the Study of Disease in Children last June there was a discussion on acute rheumatism in childhood. Although the frequency of cardiac complications was insisted on, comparatively little attention was directed to myocarditis and its treatment. The heart muscle is peculiarly susceptible to the influence of the rheumatic poison in early life, and actual myocarditis may occur independently, as well as in conjunction with endocarditis or pericarditis. Its development in the absence of a cardiac murmur is of the utmost importance, for in such a case it is liable to be overlooked, or the secondary dilatation of the heart is put down to the anæmia and debility.

Degeneration of the cardiac muscle occurs from the effect of toxins, *e.g.* those of influenza, diphtheria, and other infective disorders; or may follow the cloudy swelling which is often seen as the result of fever. Myocarditis may be acute or chronic, interstitial or parenchymatous, diffuse or circumscribed. The parenchymatous type is the one most often seen in the young, and it is commonly due to the rheumatic poison.

A few years ago I saw in consultation a girl, aged eleven years, who for two weeks had been suffering from fever, sleepiness, impaired appetite, slight cough, and restless nights. The temperature ranged from 99° F. in the morning to 100° F. at night. She was supposed to have early phthisis. There was no family or past history of rheumatism, but a month previously she had had an attack of tonsillitis. On examination the heart was found much dilated, but there was no murmur. A diagnosis of rheumatic myocarditis was made and recovery ensued after two months' treatment by salicylates and rest. I saw her again two years later. The apex of the heart was in the nipple line and there were no cardiac symptoms. The child had had rheumatic joint swelling during the interval.

DIAGNOSIS AND TREATMENT.

Diagnosis is difficult, unless there is definite evidence of rheumatism. It may be impossible to differentiate the inflammatory affection and its results from the dilatation due to loss of tone of the cardiac muscle or degenerative changes. When, however, dilatation is found in the course of rheumatic fever, or in the absence of any distinct exciting cause in a child, it should be regarded as due to rheumatic myocarditis and treated accordingly. The essentials of treatment are the same as in other forms of dilatation, namely, complete rest and careful feeding, with the avoidance of foods liable to cause indigestion and of all forms of excitement. Salicylates and alkalies are of value in the rheumatic type, but in dilatation due to other causes they may be disadvantageous. In severe cases oxygen inhalations and even venesection may be needed. Stimulants are frequently required. The prognosis depends on the causation, the extent of the

dilatation, and on the treatment. Provided the affection is rheumatic, that the child is seen before the dilatation is extreme, and that the patient is kept completely at rest in bed for six to eight weeks or more, recovery is probable. The outlook is worse if there is endocarditis present, and still more serious if there is pericarditis or adhesion of the pericardium. In the latter event the pulse remains persistently small and unduly frequent, the child is short of breath on slight exertion; and the appetite is impaired. Gain in weight and decrease in the pulse rate are good signs.

The extent of the dilatation is to some extent of value in diagnosis. If it is limited to the left ventricle it is most likely to be due to diphtheria. In such cases the more the dilatation extends beyond the nipple line the greater is the danger. Sudden death may occur at any time, even when the heart is only moderately dilated. It is more apt to result from a degenerated diphtheritic heart than from rheumatic myocarditis.

FURTHER POINTS IN TREATMENT.

Rest is of vital importance. It is easy to enforce if the child is seriously ill. It is difficult to maintain during convalescence and in mild degrees of the affection. Where possible, a trained nurse should be obtained during the acute stages. The child must be kept completely lying down and not allowed to sit up under any circumstances. It must not be excited, must not be allowed visitors, and must be kept as quiet as possible. The greater the degree of dilatation, the longer must this rigid rest be insisted upon. In no case is it advisable to limit it to less than a month. The pulse rate forms a fairly reliable guide. The pulse should be counted every four hours and charted in the same way as the temperature is recorded. When it has come down to the normal rate, the child may be propped up in bed for a short time, and the effect noted. If the dilatation has been severe, passive and opposed movements must be made use of for a few days before allowing greater muscular effort. Gradually the amount of exertion may be increased, provided no ill effects ensue. Later, the child may be allowed to get up, walk about the room, down stairs, on the level, slowly up stairs, and finally up-hill. Bicycling on the level is permissible. After six months to a year games, dancing, and gymnastic exercises can be indulged in, provided they do not involve competition and the child can stop whenever it likes. After a serious attack, precautions against over-exertion must be adopted for at least a year. The evil effects of strain are indicated by shortness of breath, inability to take food, sleeplessness, and indigestion. On the other hand there is no necessity to allow the child to become a chronic invalid. Few cases need the tactful management of the doctor more than these do. Often it is the parents who require management rather than the child. Never forget that permanent damage may result from insufficient care, and that a prolongation of convalescence is a delay of little importance in childhood.

NEW APPLIANCES AND THINGS MEDICAL.

[We shall be glad to receive at our Office, 28 & 29 Southampton Street, Strand, London, W.C., from the manufacturers, specimens of all new preparations and appliances which may be brought out from time to time.]

ALLENBURYS' MILK FOOD COCOA.

(ALLEN AND HANBURYS, LIMITED, 37 LOMBARD STREET, LONDON, E.C.)

The sample forwarded is a preparation of pure cocoa extract, deprived of a greater part of fatty matter, and "Allenburys' Peptonised Milk Food." Made according to the directions enclosed with the sample—that is to say, simply like any ordinary cocoa, with boiling water—it forms a highly nutritious beverage, which in point of flavour compares favourably with the best cocoas on the market. The absence of superfluous fats, altogether apart from the fact that the addition of peptonised milk renders it especially digestible for the convalescent, and the retention of the pure flavour of unsophisticated cocoa, should win it the approval of those who desire an easily made and withal an agreeable and digestible beverage. In using this milk cocoa the addition of milk is, of course, entirely unnecessary, but by slightly increasing the quantity of cocoa and adding a spoonful of cream an excellent chocolate may be prepared with it, equal in most respects to chocolate made in the approved fashion from many other cocoa preparations.

A HYGIENIC COIN PAD.

MR. H. THORNTON, of 31 Warwick Road, Margate, has forwarded for our inspection a model of his patent coin pad and hygienic finger damper, as designed for confectioners' use. The practice of damping the finger with the saliva is unfortunately too commonly observed, and anything that can easily obviate this method of securing a grip with the finger pad is worthy of approval. Mr. Thornton's model consists of a porcelain pad into which is fitted a piece of corrugated cork and an absorbent pad—the damper. Underneath the whole is a string box. The model is exceedingly strongly made, and forms an attractive counter ornament, and it may be utilised in many ways. As an advertising medium it has obvious advantages, and as it is simple, strong, and hygienic it is an arrangement which we should like to see in common use in all shops. It is an invention which is worth wider publicity than it appears so far to have received.

HORSFORD'S ACID PHOSPHATE.

(RUMFORD CHEMICAL WORKS, PROVIDENCE, U.S.A.)

We have received a sample of Horsford's Acid Phosphate, which consists of a solution of the phosphates of lime, magnesia, potash, and iron with phosphoric acid. These drugs have long had a reputation as valuable tonics. In the East a dilute solution of phosphoric acid has been used for many centuries as an aphrodisiac, and is used to this day. The tonic action of the phosphates is especially directed to the nervous system, of which they and the so-called organic phosphates form an integral part. There are also many conditions of malnutrition in which the phosphates undoubtedly exert a beneficial action, because they not only provide in themselves nutritive elements, but also enable the body to make better use of the other nutritive elements contained in food. There has of recent years been very considerable scientific controversy with regard to the relative merits of the inorganic phosphates to which the preparation before us belongs and the organic phosphates, such, for instance, as lecithin and its allies. Recent research has certainly not shaken the inorganic phosphates which have the advantage of being much less expensive than their more complicated allies. Horsford's Acid Phosphate is an exceedingly pleasant and suitable form of inorganic phosphate, and we think the reputation it has earned is entirely justified.

LOCAL ANÆSTHETICS.

(BENGUÉ AND CO. LONDON OFFICE, 91 GREAT TITCHFIELD STREET, LONDON, W.)

This firm has forwarded three varieties of their ethyl chloride preparations. Of these "Narcotile" is a very pure chloride of ethyl, prepared by a special process. The absence of impurities and of any strong, unpleasant odour is a valuable point in its favour, and makes it one of the best preparations of this valuable anæsthetic on the market. "Ænestile" is a preparation of pure ethyl chloride, mixed with a small amount of methyl chloride, which probably enhances its action as a local anæsthetic. The firm also supplies a pure preparation of ethyl chloride, which we have found to act excellently both for local and general anæsthetic purposes. All these preparations are put up in specially patented tubes, fitted with a valve stopper of simple and convenient construction. With a little practice it is easy for the operator to work the valve with his forefinger and to regulate to a nicety the amount of anæsthetic administered, according to the graduated scale on each tube.

ABSORBENT COTTON FIBRE.

(T. SYJER AND CO., 45 WILSON STREET, FINSBURY SQUARE, LONDON, E.C.)

This is natural cotton fibre, undyed, and, so far as we have been able to find, without any impurity, if we except a small amount of dust from which no specimen can long be kept free at this season of the year in a London office. The fibres are long and free from knots. Such a material is easily sterilisable by dry heat, and, owing to its softness, it may be used instead of gauze in dressings. The specimen submitted was remarkably absorbent, both of watery and of heavier fluids such as blood serum. The cotton fibre is supplied in 1 cwt. bags and in smaller 7 lb. parcels, at a comparatively cheap price, considering its purity.

HALL'S WASHABLE DISTEMPER.

(MESSRS. SISSON BROTHERS AND CO., LTD., HULL.)

The class of water paints known as "distempers" is one of which many varieties are on the market, but experience of the often inartistic effects some of these paints produce on the walls and brickwork coated with them convinces us that the majority do not come up to the standard of perfection claimed by their makers. There are a few exceptions, and the most striking of these is undoubtedly the washable distemper manufactured by Messrs. Sisson Brothers. It is an extremely quick-drying paint, and portions of unglazed porcelain painted with it showed no alteration in any way after having been vigorously scrubbed with a weak lysol solution. That is a test which the majority of so-called washable paints will not survive. Applied according to the directions—that is, simply mixed with water—the paint gives a smooth, lustrous surface, which does not readily peel off or crack when exposed to the sun. The hygienic advantages of such a medium are undoubtedly great, and for tropical climates such a paint should prove a veritable boon and a blessing. We are less willing, however, to agree that the small amount of cresylic acid which the specimen submitted contained can have any decided mucor-destroying power. The antiseptic value of the distemper is small, but walls coated with it can be rendered more or less aseptic, and for hospitals and sick rooms that is an advantage which it is not easy to over-estimate. The paint is supplied in a variety of shades, and the makers issue a neat little pamphlet, "Modern Development in House Decoration," which shows the manifold ways in which it may be applied to advantage in beautifying the house.

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

THE ROYAL DEVON AND EXETER HOSPITAL.

THE meeting of the British Medical Association at Exeter gave visitors interested in hospital management an opportunity of inspecting the local institutions, and among those which attracted most attention was undoubtedly the Royal Devon and Exeter Hospital. During the last five years important and extensive improvements have been effected in this hospital, which make it at present one of the most efficient, and, from a medical point of view, one of the best of provincial hospitals. There remain, it is true, several serious drawbacks to its complete modernisation.

To begin with, the main portion of the buildings is an old erection, not specially suited for the purposes to which it has been adapted. The hospital stands on a fine site, close to the centre of the town, yet outside the noise of the street traffic. It has its own private garden, which is unusually large and well stocked, and immediately fronting each balcony is a large, grassy quadrangle. A walk through the wards shows how actively the management has attempted to improve the conditions which exist, and the first feature that strikes the medical visitor is the thoroughness with which every ward, even the older ones, has been ventilated. Open to the air on three sides, with the windows large and permitting easy entrance of fresh air, and provided, moreover, with additional ventilating inlets, each ward is as fresh and clear as it can possibly be. It is usual on entering a hospital ward, no matter how modern or how well ventilated, for the visitor to perceive that he has passed into an atmosphere which is not exactly similar to that which pervades the other parts of the building. In provincial hospitals, where the air is purer and less fog laden, this sharp contrast is perhaps not so noticeable; in the Exeter hospital it is almost imperceptible. In the wards in the new wing the cheerful colours of the walls, the scrupulous cleanliness that pervades the whole apartment, and the large amount of sunlight that directly enters the room, combine to give an impression of brightness and comfort that would be hard to beat in any provincial or metropolitan hospital. In the wards in the old wing this cheerfulness is less apparent. There the walls retain their pristine dingy chocolate colour, not, we believe, the most exhilarating of colours for the sick patient to feed his eye upon. It would very greatly add to the attractiveness of the old wards if they were redecorated and repainted so as to bring them in line with the rooms in the new wing.

A feature of great interest in the building is the new operating theatre, the gift of a local lady, who very generously bore the whole of the expense connected with the building and furnishing of the set of rooms devoted to it. The theatre is in the old building on the top floor—an arrangement which strikes one as not having been very judiciously made, for it entails much labour in carrying patients to and

from the different wards. To facilitate this translation of cases a bridge across the stairway is necessary, an arrangement which is not only clumsy and liable to break down, but which entails far more trouble than is desirable. To patients, too, this rather long journey from the wards to the theatre cannot be beneficial. It seems, however, that no other situation was possible, and under the circumstances the management has made the best of the situation.

For the theatre itself the medical visitor cannot but have the highest praise. It is roomy without being unduly large, and, owing to the excellence of the ventilation, it is the reverse of stuffy. A mistake, however, appears to have been made in providing a hot-air chamber immediately above the operating table, the skylight being a double plate-glass arrangement, with a space between in which dust accumulates, and which seems to us somewhat difficult to keep clean. With this exception—which in summer time at least may become an important one so far as the comfort of workers is concerned—there is nothing to find fault with. The furnishing of the theatre is of the newest and best pattern; the operating table, from designs specially furnished by Messrs. Down Brothers, is one of the best of its kind, and the outfit of instruments appears to provide for every possible contingency.

Attached to the theatre is the old operating room, now used for septic or unimportant cases, together with an anæsthetising room and a sterilising room. In the last mentioned is to be found the steriliser, one of the most diminutive apparatuses which we recollect ever having come across. For an institution of the size and importance of the Royal Devon and Exeter Hospital the presence of so small and manifestly inadequate a steriliser savours of the ridiculous, and the fact that dressings are sterilised and the routine sterilisation of materials for ward and theatre use is not interfered with, speaks very highly indeed for the capability of the nursing staff and those in charge of the sterilising plant—if one can dignify the apology for a really efficient steriliser by calling it such. The inadequacy of the present apparatus entails a vast amount of additional trouble and inconvenience, and there cannot be any doubt that the prompt acquisition of a more commodious plant will prove much more economical in the long run.

Attached to the theatre, and really forming part of the old operating-room, is a small apartment devoted to emergency x-ray work. The usefulness of the small apparatus—which, we understand, has proved thoroughly trustworthy and suitable for the purposes required—will be evident to anyone who has witnessed the laborious and circumlocutory procedure that obtains in most hospitals when cases require to be skiagraphed before operation.

Another, and the newest feature, of the hospital is the recently opened electrical department. A

tablet on the wall of the principal room bears the following explanatory inscription: "This Electrical Department was presented to the Royal Devon and Exeter Hospital by Marianne Sanders, in memory of her husband and son, Presidents of the Hospital—19th July, 1907." Four rooms are devoted to the department, and among the instruments which are in use

at present are a high frequency apparatus, a one-lamp Finson apparatus, and an x-ray apparatus. There are, in addition, conveniences for giving radiant and electric baths. The department is necessarily as yet in its infancy, and few cases have so far been treated, but it is undoubtedly an important and useful adjunct to the means at the disposal of the staff for the treatment of patients.

ADDITIONS TO THE NORTH DEVON INFIRMARY AT BARNSTAPLE.

THIS infirmary was originally built about eighty years ago; and it is not too much to say that since that time hospital construction has been almost completely revolutionised. It is therefore not to be wondered at that much of the old building was greatly behind the requirements of the present day; and more especially was this the case as regards the sanitary arrangements and the cross-ventilation of the wards. The committee have spent about £4,650 in new work and in rearranging wards, pulling down partitions and putting in more windows. In addition to this sum about £300 will be spent on external staircases.

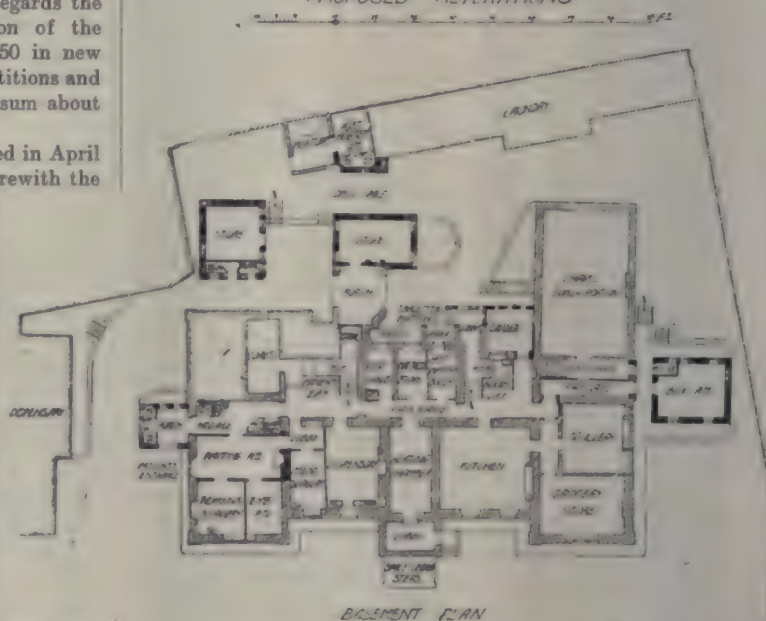
The infirmary, as altered, was formally reopened in April last by the Countess Fortescue, and we print herewith the plans of the building as now in use. To bring an old hospital up to the modern standard in all its parts would be practically tantamount to erecting a new one, and it is but seldom that funds are at hand for this purpose. The managers of the Barnstaple Infirmary may, however, fairly claim to have wiped out many of the most serious blots; and that it is not better than it is now is not so much their fault as that of the original plan. This fact should be borne in mind.

The basement contains the kitchen and other portions of the administrative department, and also at the north-west side the patients' entrance, waiting-room, women's surgery, men's surgery, and eye-room. From this, casualty-department patients can be taken on a trolley to the lift, and so to the operating theatre, without difficulty.

The ground floor has in its south-east front the entrance hall, which opens into a corridor, on one side of which are

the medical officers' rooms and board-room; and on the other side are the serving-rooms, waiting-rooms, staircases, and a passage leading to the nurses' duty-room, the isolation

NORTH DEVON INFIRMARY BARNSTAPLE.
PROPOSED ALTERATIONS.



BASEMENT PLAN

ward for two beds, and the entrance lobby to that ward. This part of the hospital is well arranged. At the west end of the corridor is the door leading to the men's ward. This ward contains ten beds. It is about 55 feet long and 20 feet wide. Each bed has about 11 feet of wall space, 110 square feet of floor space, and, assuming a ceiling height of 12 feet, about 1,320 cubic feet of air space. This is not excessive; but one fault of the ward is its width, which should not be less than 24 feet, and another is the number and disposition of the windows. Of the ten beds only three have windows on both sides, and three others have no windows at all. There is, however, a large window in the south-east end of the ward, and two smaller ones at the other end, which will materially help the ventilation; nevertheless, beds should not be placed against a dead wall. The new sanitary annexe projects from the north-west end. It is properly and efficiently cut off from the main building by a lobby, and it contains bathroom, sinks, and closets. There is a pantry attached to this ward, but neither duty-room nor single-bedded ward. At the south-east end of the main corridor are the matron's rooms, the linen room, the chapel, and a new annexe, containing bathroom, storeroom, and closet.

The first floor contains another men's ward for ten beds, the arrangements being similar to those of the ground floor

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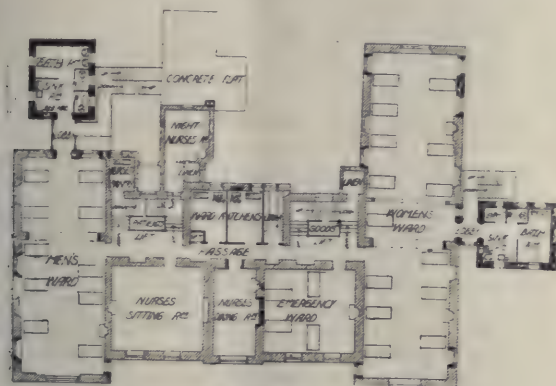


GROUND FLOOR PLAN

J. C. KENTON, ARCHT.
BARNSTAPLE

ward. The space over the board-room is given up to an emergency ward for four beds, and that over the serving-room and waiting-room to a ward kitchen, while the night nurses find their bedrooms over the isolation ward nurses' duty-room.

The women's ward is placed over the chapel and matron's rooms. It is about 80 feet long and 20 feet wide, and



FIRST FLOOR PLAN.

The operating theatre is correctly placed to the north. It has a sterilising-room attached to it, and is lighted by a north window and a roof light. The floor is of terrazzo, and coves take the place of corners, the walls being lined with white glazed tiles. The rest of the second floor is given up to bedrooms and cubicles for the staff.

The mortuary has been enlarged and a post-mortem room



SECOND FLOOR PLAN.

J. C. SOUTHCORSE ARCHT.
CHICHESTER

contains fourteen beds, each bed having about 115 square feet of floor space. Two beds are supplied with a window on both sides, nine on one side only, and three on neither side. The sanitary annexe projects from the east side of the ward, and is similarly constructed to that already described, and is cut off from the ward by a ventilating lobby.

The second floor has the children's ward over the men's ward. It contains fourteen cots.

added. Other improvements are a new larder, new heating arrangements, and a hot-water installation.

Mr. J. C. Southcombe was the honorary architect, and the work was carried out under the superintendence of Mr. Spencer Edwards. The contractor for the building was Mr. William Slee. Messrs Williams and Company and Messrs. Parkin and Sanders did the engineering parts of the new work.

SOCIAL AND POOR-LAW PROBLEMS.

FREE FOOD AND LAZINESS.

WHEN the last annual census of London's homeless poor was taken it revealed that about 2,400 of the inhabitants of the metropolis had neither shelter nor the means to procure it. The proportion to the total inhabitants of London—about 1 in 2,000—remains much the same as in previous takings of numbers, which, though at best only approximate, are fairly reliable. It is a comfort, such small comfort as we can find in the matter, that among the homeless there were only four children, the remaining numbers being made up of 1,998 men and 402 women. A considerable number of the homeless were receiving food at the depots of the Church and Salvation Armies, and other missions are engaged in feeding the hungry without any inquiry as to the cause of the hunger. At a mission hall in Shoreditch about 600 men are fed daily at a very low cost, a substantial meal being obtainable at 2d. or 3d., and in the same place free food is distributed to 350 men each Sunday and 900 men each Thursday. On the Embankment any number up to 1,500 are supplied with soup and bread without charge. Sir Shirley Murphy, who presents the report of the census, says that, in his opinion, it is possible for a man to live on a penny a day in London, if he is indifferent to the matter of shelter, and knows how to take advantage of the supplies of free and cheap food available. The constancy of the proportion of the homeless to the total population raises the question as to whether all these charitable agencies are really doing much permanent good. Whether trade is bad or good the number of these wanderers does not seem to alter. They sleep anywhere, and pick up their food for as nearly nothing as circumstances allow. One would gladly assume that they are men out of work for good and honourable

reasons, but this constancy of proportion seems to cast doubt upon that. And for the genuinely unfortunate there are workhouses, and for the chance wanderer there are casual wards. For those who can scrape up 6d. a night there are Rowton Houses and common lodging-houses. In face of all this, it seems doubtful if there is much need for extra agencies. The religious bodies indeed hope to win men's souls through gifts to their bodies, but where there is no test it seems doubtful if they achieve their aim. And there is always the risk of breeding a race of loafers, able to live without working, skilled in the location of free food depots, and skilled in nothing else. To encourage these is to encourage the submerged tenth to swamp the rest of the nation.

WORKHOUSE MEDICAL OFFICERS AND FEES FOR OPERATIONS.

A PROPOSAL has been laid before the Local Government Board that the medical officer of a workhouse should receive special fees for performing operations. This, however, the Board declines to sanction, as the salary of the medical officer ought to be sufficient to remunerate properly all his personal services. If, however, a medical officer requires to call in assistance, either in the administration of anaesthetics or otherwise, the Board is prepared to consider any application for the payment of gratuities to the gentleman who gave the necessary assistance. As a matter of fact, many medical officers of workhouses, like many general practitioners, prefer not to undertake any but simple operations. The present regulations of the Local Government Board permit of their calling in a surgeon for an operation of any magnitude, and would sanction a reasonable payment to the latter, and there seems to be no sufficient reason for making any change in the present methods, which answer well for the patients, and relieve the medical officer of a responsibility which might often be very serious.

NEWS AND COMING EVENTS.

THE Bradford Fever Hospital is to be improved by alterations and extensions at a cost of over £6,800. A new isolation pavilion and separate residential quarters for the nursing staff are provided for in the plans. The present administration block is to be enlarged by the addition of four rooms. The mortuary and outbuildings will also be enlarged.

At the annual meeting of subscribers of the Devonshire Hospital and Buxton Bath Charity, held at the Hospital on Tuesday, July 30 last, under the presidency of the Duke of Portland, it was stated that the year just passed has been a record one for the hospital, not only in the number of patients received (3,575) but also in the amount of subscriptions received. Since 1902 the hospital has been improved by the installation of a new x-ray apparatus, new fire and heating plant, and a completely new set of appliances, such as an arthromoter, radiant heat baths, and mechanical vibrators.

A GIFT of £500 has been made to the Bradford Royal Eye and Ear Hospital by Mrs. Alfred Illingworth, in memory of her father, Sir Isaac Holden. The present is the jubilee year of the Eye and Ear Hospital, in connection with which event the prefix of Royal was conferred on the institution recently by the King. Mrs. Illingworth's gift is to be used for the benefit of the Hospital and to perpetuate the memory of Sir Isaac Holden. The actual method of applying the donation has not yet been defined, but it will be decided when the Governors of the Hospital have had the opportunity of submitting their proposals to the donor.

UNDER the will of the late Dr. Nathaniel Rogers, the Senate of the University of London offer a prize of £100, open for competition to all members of the medical profession in the United Kingdom, for the best essay or dissertation setting forth the results of original investigations made by the candidate on any medical pathological subject during the preceding two years. Candidates will be permitted to present papers published during the preceding year as the dissertation. The essay or dissertation, by preference typewritten or printed, must be sent in not later than May 1, 1908, addressed to the Clerk of Committees, University of London, South Kensington.

IN the current number of *The Crown* Dr. Hadwen gives an interesting account of the cancer curers in Wales, illustrated with a portrait of the brothers Evans. Dr. Hadwen relates pathetic stories of the credulity of their patients. "In one instance a case of sarcoma which several medical men had examined and declared to be inoperable, had, evidently owing to the irritating character of the application, taken on most rapid growth . . . but the sufferer, a very intelligent man, viewed this dangerous extension as an instance of the 'herb doctor's' skill. 'It is wonderful,' he said, 'how rapidly they are bringing it out!'" The "Secret Oil" which is used by the brothers is in all probability a mixture of which the active constituent is a strong solution of chloride of zinc. Its application is excruciatingly painful, and so far the results have been most discouraging. Dr. Hadwen concludes by remarking that the failure of the treatment has afforded the public "an object lesson which should teach some of them, perhaps, to keep their heads cool when the next butterfly of empiricism emerges from the local chrysalis into the light of publicity."

At the half-yearly meeting of the governors of the Pontypool and District Hospital, the executive reported that it had been decided to fit a complete electric installation at the hospital at a cost of £150.

DEATHS from plague in India during the week ending July 13 last numbered 4,899, as compared with 5,492 during the preceding week. Of these 713 were in the Bombay Presidency, 3,692 in the Punjab, 146 in Burma, and 137 in Mysore. Deaths from the disease in Peshawar are reported to be steadily but slowly decreasing.

MERCK'S ANNUAL REPORT.—The twentieth volume of this useful and interesting publication has just been issued, and is sent free to medical men and others interested in pharmacology on application to Mr. E. Merck, 16 Jewry Street, E.C. The book is the outcome of an honest desire to furnish a brief and impartial review of the therapeutic acquisitions of the last twelve months. It gives details, and in many cases full particulars, of the literature, of all the new remedies and drugs which have been placed on the market during the year 1906. The information regarding dosage, treatment, and chemistry of the various therapeutical novelties discussed is exceedingly interesting, and should prove useful to those who wish to try the new drugs. Especially worthy of notice are the articles dealing with recent serum therapy, and with such drugs as santonin and trypan red. The last-named compound has been found useful in cases of trypanosomiasis, and rejoices (if such an infliction can be enjoyed) in the awful name of "sodium-ortho-benzidine-mono-sulphoacid-dizazo-b-2-naphthylamine-5.6-sulpho-acid".

THE STREET ARAB.—Communal obligations, as Victor Hugo pointed out, are fulfilled by a few and neglected by the many, and in no case is this more true than with regard to the vagrant youth of the streets. The State takes care that the lad is educated to a certain degree and up to a certain age: after that it concerns itself solely in punishing, often with undue severity, the mistakes which its neglect of the school-leaving lad has made possible. After 14, the school-leaving age, the street gamin is thrown on his own resources, and it depends to a great extent on himself whether he becomes a respectable member of the community or a recruit to the army of our modern slum "Macaronis." Every poor lad at that stage is a potential hooligan, and with the exception of a few charitably disposed societies no one cares whether he becomes one in actuality. For the really destitute the homes founded by that great philanthropist and, let us add, true Imperialist, Dr. Barnardo, have done and are doing a work of salvation which is more clearly appreciated every day. For the self-dependent boy the Society of the Good Shepherd is doing as good work, and its annual report, just issued, shows how deserving of support that work is. The society has a home and a hostel, the former at Clapham, the latter at Camberwell Green. In the latter are lodged 50 homeless boys who are in daily employment in the city, while the home provides for 40 orphans, somewhat after the system in vogue at Stepney. Financial support to enable the society to rebuild the home is urgently needed, and an earnest appeal has been made by the Secretary on the generosity of the public. The Director and Treasurer of the home is Mr. Russell Baker, 4 Rectory Grove, Clapham, S.W., from whom all particulars may be obtained, and to whom subscriptions may be forwarded in aid of the excellent work which the society has so unostentatiously been doing during the last six years.

NURSING ADMINISTRATION.

TRAINING IN POOR-LAW INFIRMARIES.

II. ITS ADMINISTRATIVE DIFFICULTIES.

In a previous article an attempt was made to examine into certain features which are distinctive of the training schools for nurses established in Poor-law infirmaries. It was shown that the points which distinguish infirmary training from that afforded in voluntary hospitals were twofold—practical and administrative. In other words, there are distinctions in the class of work which the nurse is called upon to do, and there are distinctions in the character of the conditions under which the work is performed. The distinctions in the class of work afforded in the infirmary as contrasted with the voluntary hospital are, as we pointed out, more apparent than real, and in so far as they appear a drawback to the making of good nurses, are under able direction susceptible of being turned to good account. The defects which lie on the surface have all their compensating advantages. There is nothing inherent in the conditions of the best Poor-law infirmaries to render their certificated nurses inferior to nurses trained under voluntary management.

We have now to consider in what way the administration, as settled by the Local Government Board, affects the training. Is the peculiar constitution of the Poor-law infirmary calculated to add to the labours of those called to the work of training probationers? Is it favourable to the maintenance of good training schools, or does it render the already arduous work of turning raw material into well-skilled nurses more anxious and intricate?

The matron's position in hospital has often been attacked as one of excessive authority. It is quite true that under certain circumstances the powers entrusted to a matron may be used tyrannically. A weak woman finding herself in a position beyond her powers is always prone to degenerate into a despot. But it must be remembered that the matron's position of authority in the hospital household is not a matter which has come down to us from former days, unmodified by modern developments as so many of the official forms of administration have done. It has been evolved in natural course as trained nursing itself has been evolved, by watching the systems which answer best and the causes of failure, and by continual success. In this way it has been proved that to train good nurses, to maintain a high standard of nursing, and secure a spirit of contented loyalty the hospital must have one recognised head over the nursing department. There are numerous counteracting springs which serve to prevent this undivided authority from degenerating into wanton self-assertion. And in practical administration it has been found that the fewer the interruptions supplied to this undoubtedly great responsibility, the better it works for the good of all concerned. The nursing department of a hospital is like a ship. It brooks only one commander. This is unhappily a lesson which the Guardians of Poor-law institutions have never been able to learn. It is inevitable that the Local Government Board should reserve to itself the right of

appeal, and it seldom errs in the direction of needless interference. But local government under its least efficient aspect is never so happy as when asserting its fleeting authority, and the tale of the Poor-law infirmaries has been one continuous record of good work accomplished in the teeth of factious opposition from those whose duty it was to recognise and support efficient administrators. Not till the Guardians have learned the lesson which most of them unhesitatingly practise in their private business, of placing one person in authority, and treating the superintendent with generous confidence, will the administration and tone of Poor-law infirmaries as a whole begin to bear comparison with the great voluntary training schools.

There are, however, compensations in the service, even to the limitations of the superintendent's authority. Few matrons depend for their success in dealing with probationers on the grim power in the background of dismissal. True, they may have to bear with girls whose presence is a standing tacit protest against good discipline, and they may be hampered by sisters as coadjutors who have long lost any aspiration with regard to work, except to reduce it to a minimum. But it is under these conditions that the real triumphs of the matron are won, and if compulsion and dismissal are removed from her armoury, it only means to an able administrator that other and more subtle modes of making her will felt will be evolved. The security of tenure, the certainty of a living wage to the end of life provided by the pension system, are restful in their effects, and remove much of that strain which tells in devotion to voluntary hospital work, where unhappily adequate pensions for long service are almost unknown. Moreover, the wear and tear which often falls severely on the matron in raising funds for the voluntary hospital is unknown in the infirmary. There is a kind of interest in perpetually having to raise money, but it is certainly very worrying. All this the Poor-law matron escapes. She escapes, too, all the varied claims on her time which are entailed by strong public interest in the affairs of her institution. It depends upon her temperament whether she regards this as a boon or otherwise. To our mind the infirmary suffers in every possible way from the strange lack of interest in its well-being exhibited by the average ratepayer. A small number of those responsible, a number among whom women Guardians are conspicuous, do sometimes take a real and intelligent interest in the needs of the infirmary. But the majority of these representatives of the ratepayers regard the care of the sick poor merely as a gigantic burden, to be suspiciously watched lest the fads of the philanthropist should make too severe a drain upon the pockets of those who are themselves unable to pay for the benefits of skilled nursing. This strangely indifferent attitude towards the work among the public at large is at the root of many defects in the Poor-law Training Schools, as contrasted with those of the hospitals.

General Practitioners' Contributions.

Important.

We propose to devote a special page to General Practitioners' Contributions. We therefore invite from practitioners contributions based upon their experience in the management of cases, and in the treatment and diagnosis of disease; especially shall we be prepared to welcome articles dealing, practically, with treatment, and with the use and value of new remedies and methods.

No article should exceed 1,100 words in length, and, if accepted, one guinea will be paid to the writer after publication. Each communication should be accompanied by a stamped directed envelope for the return of the MS. if found unsuitable.

The Relaxations of Medical Men.

We shall also be glad to pay for accepted contributions, from any member of the profession, on the subject of the relaxations of practitioners. This opens up a wide field, as it includes natural history, photography, sport, indoor recreations, and motoring. Whenever possible, original illustrations and photographs should be sent with the MS.

Suggestions Invited.

The Editor will welcome suggestions for the establishment of any new section in THE HOSPITAL, and will be glad to supply information on any subject of interest or importance to members of the profession in any part of the world.

Notices and Answers to Correspondence.

All MSS., letters, books for review, and other matters intended for the Editor, should be addressed to THE EDITOR, The Hospital Building, 28 and 29 Southampton Street, Strand, London, W.C.

Business Notices.

Letters relating to the Publishing, Sale and Advertisement Departments should be addressed to the Manager (*not to the Editor*):—THE MANAGER, The Hospital Building, 28 and 29 Southampton Street, Strand, London, W.C.

Annual Subscriptions.

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EDUCATIONAL NUMBER.

LONDON AS AN EDUCATIONAL CENTRE.

IN view of its commanding position in relation to so many forms of human thought and action, it would be strange indeed were London not able to claim a prominent place among the medical schools of the country. Though it must, perhaps, be admitted that everything is not yet exactly what educationists could wish, it still remains true that in some respects London is not only prominent, but is even pre-eminent.

The great teaching hospitals of the metropolis can boast a proud and distinguished history, not only in reference to their primary duty—namely, the treatment of the sick and injured—but also as centres of scientific, medical and surgical research. The staffs of these hospitals, both in the past and at the present day, include names which are “writ large” in the story of professional advance. In the wards and out-patient departments is to be found a collection of clinical material suitable for the purposes of the student such as cannot be rivalled in any part of the Empire. And among the clinical teachers of the metropolis are names familiar as household words wherever scientific and practical medicine is known and practised. It is inevitable, seeing what London is in the political and in the social world, that numbers of highly competent men shall be attracted within her borders. This is true of all forms of human activity. It is true of politics, of divinity, and of law. It is also true of medicine. Hence, without in the least instituting invidious comparisons, London may justly and appropriately claim the possession of larger numbers of distinguished physicians and surgeons and of experienced clinical teachers than any other city. And when, in addition, the abounding opportunities for practical study offered by the larger hospitals are considered, it is manifest that as a school of clinical medicine and clinical surgery the metropolis occupies a special and even a unique position. One other remark on this point may be permitted. The leading medical schools here are not the growth of yesterday. They have long been devoted to the training of medical students. Hence, apart from other advantages, they possess rich and valuable museums, and these are of the greatest importance in the scheme of medical education. To this statement there may also be added the further fact that many of the

sciences ancillary to medicine possess in London central institutions where there are special opportunities for theoretical and practical work, and that in all departments there are facilities particularly suited to the industrious and ambitious student.

It must, however, be recognised that, at least in the past, London has not altogether succeeded in organising victory to an extent commensurate with her great opportunities. There has been too absolute a divorce between the plan of medical education and the scheme of medical examination, and the total number of students entering at the metropolitan schools has for some years been declining. This is not the place in which to inquire the exact reason for such a condition, but it is certain that the matter has attracted the attention of those in authority. Further, whether the plan of organisation now adopted by the University of London is or is not sound, there is no question that it will do something to improve the teaching of the earlier subjects of the medical curriculum in certain of the metropolitan schools. And even if some of the smaller schools are led to abandon competition in these departments, the remainder may count on more adequate equipment and on enlarged opportunity. Still, the present state of matters does call for particular care on the part of those who are about to enter on their medical studies in London. It is of the first importance that the student at the very outset should clearly define his aim—that is to say, he should have a definite view as to whether he hopes to take a University degree, or whether, on the other hand, he will be content with a diploma or license from the Colleges of Physicians and Surgeons. Nothing is more annoying to a capable student to find out, perhaps near the end of his curriculum, that he is prevented from presenting himself for the higher qualifications because he failed in earlier days either to pass a particular preliminary examination or to attend certain special classes in the preliminary sciences. It is impossible to urge the advice just given in too strenuous terms. Indeed, there can be little doubt that neglect of a clear perception on this point has damaged the cause of medical education in the metropolis. Too late have students discovered that the curriculum they have adopted has confined their ambitions to a mere license to practise, and has left closed against them,

probably for all time, the distinction of a University degree. This consideration, further, is to-day even of more importance than it was in the past. There is an increasing recognition of the advisability of the doctor being a University graduate, and having the unquestioned right to the title "M.D." Therefore, again, we advise the student who cultivates this aim—and all should do so as far as possible—to see that

his start is in accordance with his ultimate desire. If he is safe here, he may feel certain that the steady application, even of ordinary ability, and the unwearyed use of opportunities, particularly of those which mean practical and direct personal experience, will lead him to success. And with London University as his *alma mater*, he may certainly claim an academic distinction of the very first rank.

THE SCOTTISH AND IRISH MEDICAL SCHOOLS.

DIFFERENCES of opinion doubtless exist as to the extent to which, in the interests of the whole, the principle of nationality should assert itself within the four corners of the United Kingdom. But no one would advocate its complete suppression, or would propose as a substitute a dull, drab uniformity. Some play and room for the development of individual characteristics and for the cultivation of local colour is to be desired, and particularly, perhaps, is this true in the field of education. The Scottish and Irish medical schools certainly help to discharge this function, and they can claim records of the most distinguished rank. Hence, apart from the interests of geographical convenience, it is gratifying to all who are anxious for the welfare of British medicine to know that these schools at the present day continue a line of policy which has brought to them a well-earned record of efficiency and success.

Of Scotland it has been said education is one of the staple products. Organised on a system particularly well adapted to meet the requirements of the country, her great Universities have for centuries ministered successfully to the educational wants of the people. They are essentially "corporations of students," and are in close and intimate contact with all ranks and classes of the community. These facts have largely influenced the teaching of medicine in Scotland. The various subjects included under this term have in a more or less complete fashion long constituted a "faculty" in each of the Universities, and as a consequence have been provided with an academic tone and atmosphere. The teaching has thus been framed on broad lines, and has been directed as much to the intellectual development of the student as to the provision for him of a technical equipment. Again, the medical students collected together in large Universities, and brought into close social contact with students of the other "faculties," have enjoyed the advantages which arise from such an association. In a word, the ideal of a Scottish medical education has always been the provision of a discipline which will develop the scientific spirit and will confer personal culture as well as technical efficiency. This ideal still remains. Note has been taken of the increasing demands of the scientific part of the curriculum, and by the help of the Carnegie Trust and the generosity of other donors, strenuous efforts have been made to meet these demands. Some of the recently constructed laboratories, indeed, may well fill with envy those whose lot has been cast in lands where no millionaire supports the policy of University development with the gift of a princely endowment. Altogether it may be confidently said that at no time in their long and glorious history have the medical faculties been in a higher state of efficiency and success.

It must be remembered, too, that the fees are of moderate proportions, and the economical student, especially if he has the ability to win bursaries and scholarships, can accomplish the whole of the medical curriculum at a comparatively small expense. The Scottish people proverbially believe in education, and they insist that the highest academic opportunities shall be open to all those who have brains and energy to utilise them.

Educational efforts are not confined to the Universities in the narrow sense of the term. In Edinburgh, in Glasgow, in Aberdeen, and more recently at Dundee in connection with St. Andrews, the large hospitals are practically the clinical schools of the University, and the clinical teaching is organised at a very high and efficient level. It is, and indeed always has been, a feature of Scottish medical education that the clinical instruction shall be arranged on a definite method and system equally with the courses of systematic lectures. The Scottish Universities have now not a few imitators south of the Tweed, and in the generous rivalry which needs must exist, we have every confidence they will prove themselves equal to their great reputation.

Medicine in Ireland can claim many great names in physic, and many influential clinical teachers. Here, as in Scotland, it has long enjoyed a secure position as a subject of academic study, and Irish medical graduates have in many instances attained to the highest rank and position in the public services of the Empire. There is no question of the efficiency of the teaching in the Irish schools. It has always, it may be said, been distinguished by a decidedly practical note, and by a very high standard of professional obligation and duty. The contributions made from these schools to the progress of clinical medicine and clinical surgery are the common heritage of the profession. In the University of Dublin, and the Royal University of Ireland, there are thoroughly organised arrangements for teaching all departments of the medical curriculum, and the degrees of these Universities are universally recognised as of high value and distinction. The Royal Colleges, again, grant licenses to practise, and also, through the agency of their higher diplomas, encourage advanced work in medicine and surgery. The reputation of the various Dublin hospitals as efficient clinical schools is universally allowed, whilst for the provinces successful colleges and medical schools exist at Belfast, Cork, and Galway. Altogether the Irish medical student has first-rate opportunities, and he may legitimately be proud of any distinctions which he may gain in the educational institutions of his native land.

LOOKING BACK.

A RETROSPECT OF FIVE YEARS.

THE feeling that one has regarding the first year of the curriculum is that a great deal—perhaps the greater part of it—was wasted. It was spent in mastering—if that word may be applied to a method that never attained to expertness—subjects in a half-hearted and wholly mechanical fashion. There is no necessity to discuss here the educational value of such studies as botany, zoology, biology, physics, and chemistry for the prospective medical practitioner. The fact remains that the average student, who is not a genius nor specially enthusiastic in learning sciences with which he will never have more than a nodding acquaintanceship, spends one year in work, which is, when all is said and done, wholly without profit to him in his next four. The little that he learns that is going to be useful to him in the wards or in understanding the chemistry of physiology or the physics of anatomy might be acquired in three months. The "Conjoint" student is in this respect on a far more practical footing than the member of a University. A term's close application to his biology and chemistry will suffice to take him safely across the "first," and once that is passed he can devote himself unreservedly to purely professional studies. The University man, on the contrary, has a hard and heavy grind before him, a grind that abrogates much time better devoted to clinical work, and that in the majority of cases is wasted. Few men remember much of their inorganic chemistry by the time they are "up" for their final, and botany and zoology go to the wall as soon as the mysteries of ward clerking and surgical dressing begin to attract.

Yet, had one known at the start what there was in this first year's work that should prove of value afterwards, how much more profitably might it have been spent. A keener attention to certain parts of physics—dynamics, for example—a more enthusiastic study of the chemistry of alkaloids, of poisons, and of physiological substances, and a more friendly feeling towards the life history of plants apart from mere taxonomy and vegetable histology—these might have smoothed many uniculties that were to be in the way. The first year's study should be selective, but the authorities demand that we should learn up a syllabus of things utterly useless from a practical point of view. If medicine were a business instead of a quasi-science, how much better would the first year's course be delineated!

Let us say at once that we do not for one moment attempt to propose that utility, and utility only, should be the guiding string in medical education. But it is idle to draw up a list of educational aids that are supposed to broaden the purview of the student and to render his knowledge more catholic and less discreet. It is not the business of the medical curriculum to make the student an all-round good man. To ensure a proper attention to general knowledge the preliminary examination, passed before the first professional, should prove ample. At present it does not do so by any means. During the first year the medical student learns much that he ought to have mastered long before he came to a medical school.

He knows the niceties of syntax, rules of grammar, and catch questions in irregular verb formation; but he cannot spell properly, he cannot read a professional paper in French or an old author in easy dog-Latin, and he is utterly incapable of expressing himself intelligently upon any subject of general interest which has no special relation to sport.

For the Conjoint man there is a ray of hope in the fact that his first year is to be measured, not by months, but by weeks. If he is energetic and enthusiastic he can finish with the examination part of the extra sciences in three months, and devote four and a-half years to studying purely professional subjects. The University man, on the contrary, has only two, or at most three years, in which to work up his clinical study. He may come to the latter better prepared by knowing more of the allied sciences, but it is doubtful if he gains half so thorough or so efficient a knowledge of ward work as the Conjoint man who has taken full advantage of his opportunities.

To gain the full value of the first year and to utilise the time spent in mastering outside subjects, the student should attempt to obtain an early acquaintance with the work that he will have to do later on. We do not mean that he should waste his time in attending operations, the rationale and technique of which he does not understand, or that he should listen to lectures on specific diseases when he does not know the difference between a rub and a rôle. But he should read occasional medical articles, and commence, even in his first year, to learn the essentials of physical examination. At the same time he should devote a few hours each week to subjects egregiously neglected by the average student. Some acquaintance with Jevon's "Logic" will be of infinitely greater advantage to him in after-life than a glib and facile knowledge of the formulæ in Wade's "Chemistry," and the time spent in learning a foreign language he will never regret. No better advice can be given to the medical student than to read regularly some foreign scientific journal, making a point to peruse some article in it once every week.

THE SECOND YEAR.

Anatomy and physiology are stern subjects, and it would be well for the student if he realises as soon as he commences with either of these sciences that they are going to be lifelong studies with him, not to be cast aside as he has cast aside his chemistry and his zoology. Both have the fascination that belong to non-exact sciences, and as such are attractive to the student at first; although the fact that they demand close application and a continuous exertion on the part of the learner diminishes their attractiveness after the first six months, when the novelty of dissecting out the ulnar nerve or of stimulating the vagus-sympathetic in the frog and watching the curves go wrong on the smoked paper has lost its interesting freshness. In the dissecting room and the physiological laboratory every student is equal. The Conjoint man has the same scope, the same opportunities as the University or Fellowship man,

and if he is wise he will not limit himself to the syllabus of his examination, but make excursions into fields somewhat wider and fresher. In anatomy it is unfortunately the custom to keep to one text-book and to cram. The choice of text-book is not a difficult one. But there are certain books which the student would do well to read through at least once during his second year, making such notes from the text as may be of use to him. Of these, to mention only a few, one is Bland-Sutton's little book on "Ligaments"; another is Poirier's standard work on the lymphatic system; and a third, well enough known to all Fellowship men, is Keith's "Embryology." The anatomical student also should make the fullest use of the museum attached to his school, and, if he has a chance to do so, should visit and inspect the museum of the Royal College and try to obtain at least a general idea of comparative anatomy.

In physiology the limits are far less narrow than in the sister science. Here, too, most students content themselves with one text-book, in the majority of cases Halliburton or Starling. An occasional perusal of articles in some other standard work will be of the greatest value, and, more than that, the reading of chapters on physiological medicine will prove of the utmost service. The chapters on the anatomy of the eye, of the digestive system, of the special senses, and of lymph production and the work of the kidney in the large edition of Professor Schaefer's work will well repay the extra time spent in reading them. The "Journal of Physiology," too, contains articles which have a permanent value, and the student's own inclinations will guide him in his selection of special works. His teachers will always be ready to help him in selecting works that will aid him afterwards, and he can do no better than consult them whenever he feels himself in a difficulty.

But the great thing in the second year is for the student to pay careful attention to such portions of his ordinary work as will be useful to him afterwards. In anatomy he will soon find out that there are special regions which are of infinitely more importance than others. A knowledge of the actions of muscles, for instance, is imperative to understand the displacements in fractures; an acquaintance with the ordinary tests for pathological substances in urine is of equal importance. Not infrequently it happens that the ward clerk finds himself utterly at sea in testing vomit, urine, feces, etc., in the wards, the reason being that he has never taken a practical interest in the tests, regarding them as purely examination matters. A great deal might be written on the shortcomings of present-day physiological teaching at most of our medical schools, but after all the fault lies largely with the student himself. If he has sufficient interest and enthusiasm he will not need stimulation from his teachers; he will go out of his way to learn, instead of merely waiting to be taught.

THE THIRD AND FOURTH YEARS.

These are essentially years of clinical study, and once in the wards the student realises, more forcibly than he has done before, that he is really acquiring

knowledge that will be of practical value to him afterwards. He will have to serve a certain number of months in certain well-defined capacities—as ward clerk, dresser, extern obstetric assistant, and as dresser or clerk in some special department. If he has laid out his time carefully he will be able to devote his attention to special subjects before his final is at hand, and will have left himself a reasonable amount of time for revision before that examination. It is therefore imperative that he should schedule out his time carefully beforehand. A certain amount of overlapping is inevitable in most hospitals, and few students are able to make the most of their opportunities owing to lack of time. The average man will have to consider very carefully to what special subjects he can apply himself. Each branch—ears, eyes, diseases of women, throats, etc.—offers certain advantages, and if it is possible, as it sometimes is, for the student to deal with them all successively, his benefit will be all the greater.

In London the student has a number of advantages, the value of which it would be difficult to overestimate. He may attend out-patients at most of the special hospitals, and one at least he should make a point of going to—the National Hospital in Queen Square, where he will obtain the benefit of exceptionally fine clinical teaching. The fever hospitals, attendance at which is compulsory, will afford him unrivalled scope for getting a thorough acquaintance with that branch of medicine. Most medical schools offer special facilities to their students for bacteriological study, and if the student desires, at a later date, to take his diploma in public health, an early interest in that and allied subjects will be of service to him.

THE FINAL YEAR.

During his final year the student is in a position to see for himself what he has missed and to attempt to remedy his shortcomings by additional reading or study. Each man will doubtless pick out for himself his special text-books, his favourites and his pet aversions. But to each and all the advice to "read largely" can be given. Cram synopses and condensations may do for examination purposes: they will never help the student to master his subject fully. Nor can reading alone, unaccompanied by practical work, unremitting attendance in the wards in the post-mortem room, and in the museum, make him a full man in medicine.

Many men make the mistake of sticking so closely to their own hospital and medical school that they lose sight of the benefits to be obtained at other institutions. The fellowship between students of different hospitals is admirable, and the student who makes use of it to get an insight into the working and teaching of other schools besides his own will find himself well repaid. So also will the man who goes farther afield—to the continental schools during the vacations or to provincial hospitals when he has the chance of inspecting them.

When the student commences his course he hardly knows his limitations or his means. Bit by bit the knowledge of both comes to him, and it depends mainly on himself, how far he will be advanced at the conclusion of his five years' course.

THE MEDICAL CURRICULUM.

QUALIFICATION AND REGISTRATION.

THE first thing a medical student has to do is to register himself as such, because the five years of study which are necessary in order to obtain a qualification are dated from the time of registration. For this purpose application must be made to the Registrar of the General Medical Council, 299 Oxford Street, London, W.

The student, however, cannot be registered until he has (1) passed a preliminary examination in Arts which is recognised by the General Medical Council, and (2) has commenced medical study.

A complete list of the recognised preliminary examinations may be obtained on application to the Registrar of the General Medical Council; and it is essential in any case to discover at a sufficiently early period what preliminary examinations are recognised by the particular examining body that it is proposed to work under. For example, with few exceptions, the London Matriculation is the only preliminary examination which will permit a candidate to proceed to the higher examinations in order to become a graduate of the University of London.

Wherever he proposes to study and whatever qualification he intends to get, the courses of study which a medical student has to undergo are really very much the same; they may be divided, generally speaking, into the two groups of the preliminary and the clinical.

But it is not, as a rule, compulsory to undergo the necessary courses of instruction in these two divisions of medical education at the same school. Often a student will be well advised to undergo his preliminary training at a provincial school, or as a student of the University of London, and to pursue his clinical studies elsewhere, as in one of the large Metropolitan hospitals.

The following is a list of the examining bodies and

the degrees and diplomas granted by them which admit the graduate or diplomate to enter his name in the register of legally qualified medical men:—

ENGLAND.

| EXAMINING BODY. | QUALIFICATION. |
|---|--|
| University of Oxford ... | M.B., B.Ch. (This degree is only obtainable after graduating in Arts.) |
| University of Cambridge ... | M.B., B.C. |
| University of London... | M.B. |
| University of Durham ... | M.B. |
| University of Birmingham ... | M.B., B.Ch. |
| University of Liverpool ... | M.B., Ch.B. |
| Victoria University of Manchester ... | M.B., Ch.B. |
| University of Leeds ... | M.B., Ch.B. |
| University of Sheffield ... | M.B., Ch.B. |
| Conjoint Examining Board in England ... | M.R.C.S., L.R.C.P. |
| Society of Apothecaries of London ... | L.S.A. |

SCOTLAND.

| | |
|--|--|
| University of Edinburgh ... | M.B., Ch.B. |
| University of Glasgow ... | M.B., Ch.B. |
| University of Aberdeen ... | M.B., Ch.B. |
| University of St. Andrews ... | M.B., Ch.B. |
| Conjoint Examining Board in Scotland ... | L.R.C.S. Edin. L.R.C.P. Edin., & L.F.P.S. Glasg. |

IRELAND.

| | |
|---|--|
| University of Dublin ... | M.B., B.Ch., B.A.O. (These degrees are only conferred on graduates in Arts.) |
| Royal University of Ireland ... | M.B., B.Ch. |
| Conjoint Examining Board in Ireland ... | L.R.C.P.I., L.R.C.S.I. |
| Apothecaries' Hall of Ireland ... | L.A.H. Dub. |

Many of these examining bodies lay down certain restrictions as to residence, and it is therefore important that an intending candidate should learn what these restrictions are by applying to the examining body from which he wishes to obtain his qualification.

THE CONJOINT COURSE.

THE student who is desirous of taking the Conjoint qualification—that is to say, the double diploma of Member of the Royal College of Surgeons and Licentiate of the Royal College of Physicians—has to comply with the regulations laid down for medical qualifications generally, a summary of which has already been given.

When registered as a medical student the candidate has to show that he has attended courses of lectures and practical work in chemistry and biology, before he is allowed to proceed to either the first or the second part of his "first." If he wishes to take the third part at the same time he has to show proof that he has been properly instructed in practical pharmacy by a recognised chemist or registered practitioner. The subjects for the first examination are chemistry and chemical physics, biology and pharmacy. In the first part the examination is partly written and partly practical; in the second and third parts it is wholly oral. The paper in chemistry does not usually

present any difficult features; the questions set are straightforward and not tricky, and the examination tests fairly accurately the candidate's knowledge within the limits prescribed. These limits are not very wide, but they are sufficient for all practical purposes and the knowledge which the student acquires while he works for the first part of his first will be of real service to him later on. The practical part of the examination consists of simple quantitative and qualitative analysis, and candidates usually find the test a comparatively easy one. Assuming that the student has had some preliminary training, such as can usually be obtained at the general schools from which he passes his preliminary, he ought not to take a longer time than six months to pass the first and second parts of the first. Many students take both parts after only three months' work.

The biology required for the first examination is exceedingly elementary. A knowledge of the structure (acquired by actual dissection) of the frog, the

earthworm, and the dogfish, and of the life history of the hydra, together with the elements of general biology is required. The examination is entirely oral, lasting, like all the *viva voces* of the first and second examinations, for a quarter of an hour. The candidate is asked to "spot" certain parts, to identify specimens under the microscope or in jars, and to answer questions connected with the subject he has been working at. The scope of the examination is shown by a perusal of the standard text-book, "Chalmers Mitchell's Biology," which is the only book the student need obtain, so far as his work in this part of the first is concerned.

For the chemistry there are many good text-books. Those most generally used are Corbin and Steward's Chemistry and Luff and Page's Chemistry (Lewis, 7s. 6d.), of which the former is specially intended for Conjoint students, while the latter contains more information, especially on the chemistry of alkaloids.

The third part of the first examination—practical pharmacy—the student may with advantage defer till he has acquired some knowledge of drugs in his ward work. This part is purely oral, the candidate being asked to "spot" drugs, to name their doses, preparations and strengths, and sometimes he is questioned on their active principles. No text-book adequately gives the essentials of pharmacy required for this examination, but Wilson's Pharmacy has been specially written for the use of Conjoint students, and will be found exceedingly practical and concise. The student, who should take an active working interest in this branch of study of his first examination, may with advantage read works on therapeutics or *materia medica*. Of these Hale White's *Materia Medica* (Churchill, 8s. 6d.) may be recommended as one of the best of its kind.

THE SECOND.

Having passed his first, or the first two parts of it, the student is allowed to enter the dissecting room and commence his study of anatomy and physiology. He must be engaged in the study of these two sciences during one whole summer and one whole winter session before he can enter for his second examination, and during that time he must have actually dissected several "parts," and must have attended a course of instruction in histology and practical physiology, together with a course of lectures (six months) in physiology and anatomy at a recognised medical school.

The second examination is both oral and written. There are two papers, one in each subject, and each has six questions, of which the candidate must answer at least four within the stipulated three hours. Here, too, as in the "first," the questions are straightforward, and the student who has displayed average diligence in his studies should not have much difficulty in satisfying the examiners at the end of his second year. The *viva voces* are purely objective, and the candidate is rarely asked to describe any structure. A knowledge of bones and of regional anatomy, together with a general acquaintance with the parts he has dissected will usually suffice for the student. In physiology he should know his slides and his chemical physiology accurately.

In anatomy Conjoint men will do well to stick to one text-book of general and one handbook of practical anatomy. Individual taste and inclination will guide the selection of a text-book in the majority of cases, for there are so many excellent volumes to be had that selection between them, on their merits, is impossible. Those most commonly used are Gray's Anatomy (Longman's, 32s.), Cunningham's General Anatomy (Young and Pentland), Morris's Anatomy, Cunningham's Manual of Practical Anatomy (Young and Pentland, 2 vols., 12s. 6d. each), Ellis's Practical Anatomy, Buchanan's Practical and General Anatomy—all excellent. In physiology the more commonly used text-books, such as Halliburton's Physiology (Murray, 18s. 6d.), Starling's Physiology (Churchill, 15s. 6d.), Waller's Physiology (Longman's, 18s. 6d.), Schaefer's Histology (Longman's, 9s.), Halliburton's Chemical Physiology (Longman's, 4s. 6d.), Hill's Physiology (Arnold, 6s.), and Practical Physiology (Arnold, 12s. 6d.), will generally suffice.

THE FINAL.

For the final or qualifying examination, the student must produce evidence of having attended at a recognised medical school specified courses of lectures on medicine, surgery, midwifery, pathology (including pathological histology and bacteriology), pharmacology, and therapeutics, forensic medicine and insanity, and public health, of having received systematic practical instruction in these subjects, and of having performed operations on the dead body. In addition he must show that he has attended, since passing his second examination, the practice of medicine and surgery, demonstrations in the post-mortem room, clinical lectures on medicine and surgery and diseases of women, and of having served as clerk and dresser in the wards. He must also have attended special classes in ophthalmology, in fevers, in lunacy and in vaccination, and must have attended twenty labours. In addition he must be twenty-one years of age or older.

The examination is in three parts, medicine, surgery, and midwifery, and the student is allowed to take the third part at the completion of four years of medical study. The examination in each part comprises a paper of six questions, four of which must be dealt with, and a *viva voce*. In surgery and medicine there are additional *viva voces* in anatomy and pathology, together with a long *viva* on "clinical cases."

In preparing for his final the student will find that his best course is to attend practical classes and demonstrations as often as possible, to keep a note book, in which particulars of typical cases can be systematically entered, and to "read largely." For examinations the usual text-books serve admirably, but they should be supplemented by the reading of special monographs whenever opportunity allows. The examinations test above all a man's practical knowledge: prognosis, treatment and diagnosis are more fully discussed at the clinical *vivas* than theoretical medicine or surgery, and for the most part these are just the points upon which the student learns comparatively little even from the best text-books.

CAMBRIDGE UNIVERSITY.

THE degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (B.C.) at this University are only conferred after the entire course of study with examinations for both has been carried out. The B.C. is, therefore, in itself a complete and registrable qualification to practise, and is frequently so used. To obtain either of these degrees it is necessary to pass five years in the study of medicine after registration as a student, and to reside for three years at the University. It is not necessary to take any degree or examination in arts, except the Previous examination (or "Little Go"), which is a compulsory preliminary to every degree course, and corresponds to the matriculation of most other Universities. Holders of scholarships are generally required by their college authorities to take an honours course and examination (Tripos) for the B.A. degree, but, apart from this, most medical students at Cambridge do of their own free will take that degree in a Tripos or Pass examination.

Although it is obligatory to reside three years in the University, the student need not do any medical study during that time unless he pleases; the necessary minimum five years of study may be partly or wholly spent in any institution approved by the Board for Medical Studies, and, while there are few who do not spend some part at least of their three years' residence in such study, there are fewer still who do not seek a part of their medical education outside the precincts of the University.

To the Previous examination reference has already been made; this should be passed at the commencement of the first term of residence, unless exemption has already been obtained by some examination recognised for the purpose. The professional examinations are three in number. The first comprises physics, chemistry, and biology; like similar examinations elsewhere, it is divided into two parts, which may be passed separately. Those who have already studied the subjects before coming into residence and have negotiated the Previous examination, will find little difficulty in passing both parts at the end of their first term; for others, a moderate diligence should produce a similar reward at the end of a year. The second absorbs at least two years' work, and frequently more; the standard in anatomy and physiology, which must be passed together, is a very high one indeed, and although the teaching of these subjects in the University is unsurpassed, the percentage of failures in this examination is always large. During the period of preparation for this examination, the medical student who is desirous of an Arts degree must also arrange his studies to that end. He who desires honours in natural science must select either three or four subjects in which to be examined, and for the majority it is most convenient that human anatomy and physiology should be two of these. For the other subjects comparative anatomy, zoology, botany, chemistry, physics, and geology are the favourites with medical students. In the third, or Final examination, there are two parts: one consists of pathology, bacteriology, pharmacology, etc., and may be taken as soon as various courses of lectures and laboratory work in those subjects have

been duly attended; the other includes medicine, surgery, and midwifery with gynaecology, and it may not be attempted until the completion of the scheme of medical study, which includes three years' attendance on the practice of a recognised hospital.

In pathology and the other subjects of the first part of the Final examination there are excellent courses of lectures and demonstrations in the University laboratories, and Long Vacation courses in these subjects are especially popular. For the remaining part it is usual to study at one of the large London or provincial medical schools, though there are facilities in the University and at Addenbrooke's Hospital for completing the entire course without leaving Cambridge. This examination is a distinctly searching one, but of an eminently practical kind; the examiners devote themselves to finding out what a man knows of his work, rather than to tripping him on catch points of no intrinsic importance. Many students who present themselves for it have already obtained a registrable qualification from a less exacting corporation and fulfilled a resident hospital appointment; such rarely fail at Cambridge. At the same time an unqualified man has an excellent chance if he has made the most of his opportunities in the wards and out-patient rooms of a large hospital.

When the courses and examinations here sketched have been concluded successfully, the student may take the degree of B.C. at once, but for the M.B. he must prepare and submit a thesis on some subject in medicine, surgery, or midwifery, selected by himself. Although original research is not essential, this thesis must bear evidence that it is founded on the personal observations and contains the personal reflections of the author, otherwise a refusal is certain.

For the degree of M.D. it is necessary to have been M.B. at least three years, and to submit a thesis on some subject in medicine (not in surgery), which is a definite research or contribution to the knowledge of its subject. This must be of a much more elaborate nature than the M.B. thesis. Masters of Arts of four years' standing are allowed to present a thesis for this degree at any time after complying with all the regulations for the degrees of M.B., B.C. A degree of Master in Surgery (M.C.) is also given by the University, as well as diplomas in public health and tropical medicine.

The principal facilities for post-graduate study at Cambridge are rather in the sciences auxiliary to medicine than in any branch of actual therapeutics. In physiology, bacteriology, pathology, etc., there are opportunities of, and equipment for, research unrivalled in the kingdom; studentships and scholarships are awarded for the promotion of this both by the University and by individual colleges. Recently the Lecturer in Pathology, Dr. Strangeways, has collected funds for the scientific investigation of disease; the first subject of this research is osteoarthritis, several sufferers from which are under observation by the lecturer and an endowed assistant investigator. A newly established chair is that of Protozoology; the first professor is Dr. Nuttall, and the pathogenic protozoa are, of course, those to which the greater part of the work done will be devoted.

THE LONDON.

THE student who desires to take the degree of M.B. of the London University has to pass the University Matriculation Examination, held thrice yearly in January, September, and June. The Matriculation is accepted as a preliminary examination for graduation or qualification in medicine, provided the candidate has taken Latin as one of the optional subjects, and formerly no other examination exempted from the matriculation so far as degrees of the University were concerned. Recently, however, the Senate has seen fit to rule that several other examinations may be accepted instead of the usual Matriculation under certain conditions. For such exempted candidates standing, in University language, will date from the time of registration, and, except under very special circumstances when extraordinary permission may be granted by the Senate on application, no matriculate may proceed to a degree within three years of the date of his matriculation.

THE PRELIMINARY STUDIES.

Assuming that the student, then, has been registered as a matriculated student of the University, either upon passing the examination or after having been exempted from it, he is able to devote himself to medical study. He must attach himself to one or other of the various medical schools, and devote himself during his first year to mastering the subjects—chemistry, biology, and physics—required for his Preliminary scientific or first professional examination. It will take him a full year to work up these subjects, though he may pass the examination in parts if he prefers. Many candidates, instead of doing the Preliminary scientific, work somewhat more widely and attempt to take the Intermediate scientific, which, provided the candidate has passed in the requisite subjects, exempts from the Preliminary scientific, and at the same time enables the student to proceed to his B.Sc. degree if he chooses.

THE INTERMEDIATE EXAMINATION.

The student is admitted to the Intermediate examination, the subjects of which consist of anatomy, physiology, and pharmacology, two years after having passed Part I. of the Preliminary. Time spent

in working at the subjects of anatomy and physiology is not recognised by the University until the student has passed the Preliminary. His second and third years will thus be spent in work in the dissecting room and physiological laboratory. Here he will be able to work more broadly and more minutely at the subjects than the Conjoint student is able to do. Thus he may be able to dissect the whole body, and to do several parts twice over; he can also devote his attention to dissecting the brain and spinal cord—subjects which Conjoint students are usually unable to give much time to. In physiology he can do more work in histology and experimental physiology, while his lectures in pharmacology will prove of great service to him afterwards. The examination itself is of average difficulty. The candidate is required to dissect a part, and is examined *viva voce* in each subject, with written papers in each subject and practical work in physiology. If the student has been diligent at his work he should not have the slightest difficulty in passing his intermediate examination well after the two years' period.

THE FINAL YEARS.

Having passed his "Inter.," the student enters the wards, generally in the capacity of clerk, and goes through the ordinary routine duties of dresser and extern obstetric assistant. Two years after passing the Inter. he is allowed to enter for his final examination, which consists of the usual professional subjects. The final is by no means a stiff examination; compared with the Preliminary examination, it is even an easy one. Special attention must be paid to a few subjects. Thus the student will do well to keep himself acquainted with pathology and morbid anatomy; midwifery and forensic medicine, also, are subjects in which many candidates fail. But the two years' ward work, supplemented by reading and attendance at the outpatient department, will enable the student to acquit himself well at the final. The last examination is written, oral, and practical. The candidate is required to examine and report on selected cases, to do practical bacteriological work, and to be acquainted with the essentials of operative surgery, though actual operations on the dead subject are not demanded.

OTHER UNIVERSITIES.

THE UNIVERSITY OF BIRMINGHAM (FACULTY OF MEDICINE).

In order to obtain the degrees of M.B. and Ch.B. five examinations have to be passed. The first is in chemistry, physics, and elementary biology; the second in anatomy and physiology; the third in pathology, bacteriology, and materia medica and pharmacy; the fourth in forensic medicine, toxicology, and public health; and the fifth, or final, in medicine, surgery, midwifery, gynecology, therapeutics, mental diseases, and ophthalmology. The University also grants degrees in dental surgery,

B.D.S. and M.D.S., and a diploma (L.D.S.), and a diploma (D.P.H.) and a degree (B.Sc.) in public health. The General Hospital and the Queen's Hospital, containing between them upwards of 400 beds, are amalgamated for the purpose of clinical instruction, which is carried on under the direction of the Birmingham Clinical Board.

UNIVERSITY OF DURHAM.

For students who intend to graduate at the Durham University it is necessary that one of the five years of professional education should be spent in attend-

ance at the College of Medicine, Newcastle-upon-Tyne. During the year so spent the student must attend the medical and surgical practice and clinical lectures at the Infirmary, which contains over 400 beds. No residence at Durham is necessary. The remaining four years of the curriculum may be spent at Newcastle-upon Tyne or at one or more of the recognised medical schools.

UNIVERSITY OF EDINBURGH.

To obtain the Edinburgh medical degree it is necessary to pass the Preliminary Examination or its recognised equivalent, and to pass four professional examinations. The first is in botany, zoology, physics, and chemistry; the second in anatomy, and physiology, the third in pathology, materia medica, and therapeutics, and the final in surgery, clinical surgery, medicine, clinical medicine, midwifery, clinical gynaecology, forensic medicine, and public health.

The degree of M.B. is not conferred separately from that of Ch.B. In order to obtain the degree it is necessary to spend at least two of the five years of medical study in the University of Edinburgh.

UNIVERSITY OF ABERDEEN.

The regulations are practically the same as those given for Edinburgh. Clinical instruction is obtained in the Royal Infirmary, which contains 250 beds, in the Sick Children's Hospital, and several other institutions, including the Royal Lunatic Asylum and the City Fever Hospital.

THE UNIVERSITY OF SHEFFIELD.

Degrees of Bachelor of Medicine and Bachelor of Surgery.—A candidate for the degrees of M.B., Ch.B., shall produce certificates that he will have attained the age of 21 years on the day of graduation; that he has pursued the courses of study required by the University Regulations during a period of not less than five years subsequently to the date of his registra-

tion as a medical student by the General Medical Council, three of such years at least having been passed in the University, and one year at least having been passed in the University subsequently to the date of passing the First Examination. Three examinations must be passed.

The subjects of the First Examination are Chemistry, Physics, and Biology.

The subjects of the Second Examination are Anatomy, Physiology, Materia Medica, and Pharmacy.

The subjects of the Third and Final Examination are divided into two parts, namely, A (Forensic Medicine and Toxicology, Public Health, and Pathology and Morbid Anatomy), and B (Medicine, including Pharmacology and Therapeutics, Mental Diseases, and Diseases of Children, Surgery, Obstetrics, and Gynaecology). Candidates may present themselves for examination in both parts on the same occasion or separately, but Part A may not be passed before the completion of the fourth year of study. Candidates for the whole examination, or for Part B, must have completed the fifth year of study. Candidates for the degree of Doctor of Medicine must have passed the examination for the degrees of M.B., Ch.B., at least one year previously, must present a thesis embodying observations in some subject approved by the Professor of Medicine, and must pass an examination in the Principles and Practice of Medicine. Candidates for the degree of Ch.M. must have passed the examination for the degrees of M.B., Ch.B., at least one year previously, and must, since taking the degrees of M.B., Ch.B., have held for not less than six months a surgical appointment in a public hospital or other public institution affording full opportunity for the study of Practical Surgery. The subjects of examination are Systematic, Clinical, and Operative Surgery, Surgical Anatomy, Surgical Pathology, and Bacteriology.

THE FELLOWSHIP.

The Fellowship of the Royal College of Surgeons, justly esteemed as the premier qualification that the student can obtain in surgery, holds out certain attractions which the student would do well carefully to weigh. To obtain it it is necessary to pass two examinations, a preliminary and a final.

The Preliminary examination takes place twice every year, in May and in November, and is held in London. The subjects are Anatomy and Physiology, and candidates must have passed the second Conjoint examination or some other equivalent examination which exempts them from it. They must also (except in the case of qualified men) have spent two winter sessions in dissections and attendance at physiology classes at a recognised school. The examination is partly oral and partly written. Two papers are set, one in physiology and one in anatomy, four questions being given with an allowance of three hours for each paper. The scope of the questions can be easily seen by studying the papers set during the past few years, copies of which may be obtained on application to the Secretary, Examination Hall, Embankment. The oral examinations are two,

lasting fifteen minutes each, in the two subjects. To a very large extent the questions asked at the vivas are objective, "spotting," and straightforward questions on regional anatomy, embryology, special anatomy, physiology and histology being usually in the programme. The examination has the reputation of being unusually stiff, with more than the average element of luck appertaining to it, but its difficulty need not frighten the average student or practitioner who is willing to pay special attention to the two subjects. A good, sound knowledge of anatomy and physiology is required, and if the candidate has been diligent at his practical work in the dissecting room and laboratory, and has supplemented the knowledge there gained by reading, he stands a good chance of success.

The examination for the final fellowship takes place in May and November of each year, and consists of written papers, *viva voces*, clinicals, and operative surgery. The fee for the examination is £15 15s., and candidates are required to be members of the college who have been six years in practice or the study of medicine.

HIGHER QUALIFICATIONS FOR PRACTITIONERS.

UNIVERSITY DEGREES.

DEGREES are hall-marks, though the practitioner himself is the gold, and are of special importance in making application for appointments. Some Universities have issued special regulations under which the recent graduate may be granted the M.D. degree.

The University of London will not permit anybody to be examined without passing the matriculation examination. After passing the matriculation, three years must elapse before a degree can under any circumstances be granted. After passing the preliminary scientific examination, Parts I. and II., a graduate is permitted to proceed to the intermediate and M.B. and B.S. examinations without the intervals prescribed by the regulations, provided they produce certificates of having done the prescribed course of study.

The University of Durham requires that practitioners should have been registered at least 15 years and be 40 years of age, and produce certificates of moral character from three registered practitioners before admitting to the degree of M.D. without residence. The ordinary degree is granted after examination, particulars of which appear on pp. 602-603.

The candidate must pass a professional examination in the Principles and Practice of Medicine, including Psychological Medicine, Hygiene, and Therapeutics; Principles and Practice of Surgery; Midwifery and Diseases of Women and Children; Pathology, Medical and Surgical; Anatomy, Medical and Surgical; Medical Jurisprudence and Toxicology. The examination is conducted by means of printed papers, clinically and *viva voce*, at the College of Medicine, Northumberland Road, Newcastle, and in the Royal Infirmary, Newcastle. The inclusive fee is 50 guineas.

The examinations are held twice a year, towards the end of April and of September. Applications should be made to Professor Howden, Secretary of the University of Durham College of Medicine, Newcastle-on-Tyne, at least 28 days before the commencement of the examination.

Registered practitioners are admissible without further curriculum to the M.D. examination of the University of Brussels. The examination is divided into three parts: I. Medicine, Pathology (with microscope work), Therapeutics, Mental Diseases, and Diseases of Women and Children; II. Surgery, Midwifery, Hygiene, and Medical Jurisprudence; III. Clinical Medicine and Surgery, examination in Midwifery, Ophthalmology, Operative Surgery, Regional Anatomy with dissections. The examination is conducted in French through an official interpreter. The examination is *viva voce*.

Examinations are held on the first Tuesday in November, December, February, May, and June. The three parts of the examination may be got through in a week. The fees amount to £22. Application should be made to the Secretary of the University, Brussels. Dr. F. H. Edwards, Camber-

well House, Camberwell, S.E., will also give information.

HIGHER QUALIFICATION.

The Royal College of Physicians of London grants its membership after examination to graduates in medicine of recognised Universities, or to licentiates of the College, being above the age of 25 years, who do not engage in trade, do not dispense medicine, and who do not practise in partnership. The examination, which is held in January, April, July, and October, is partly written and partly oral. The fee for the membership is £42, but if the candidate is a licentiate the fee is the difference between what he has already paid and £42. In either case £6 6s. is paid before examination. The fellowship is granted by election.

The Royal College of Surgeons of England grants a diploma of Fellow by examination. Particulars of the examination appear on page 603.

The Royal College of Physicians of Edinburgh admits to its membership licentiates or graduates over 24 years of age after examination in medicine and therapeutics and one or more of the following subjects selected by the candidate: (1) one or more departments of medicine specially professed, (2) psychological medicine, (3) general pathology and morbid anatomy, (4) medical jurisprudence, (5) public health, (6) midwifery, (7) diseases of women. A candidate 40 years of age and ten years in practice may be excused any part of or all the examination by the Council. The fee to be paid by a licentiate is fifteen guineas, by others thirty-five guineas. A member of three years' standing may be elected a Fellow. The fee is £64 18s. Women are not admitted.

Royal College of Surgeons of Edinburgh.—The Fellowship is granted, after examination, to any registered practitioner who holds the diploma, is 25 years of age, and has been in practice for two years. The examinations are written, oral, and practical. The fee is £30 to those who hold the diploma of Licentiate of the College, and £45 to others (no stamp duty is payable on the diploma).

Faculty of Physicians and Surgeons.—Registered practitioners are admitted to the fellowship by examination and subsequent election.

Four examinations are held annually (January, April, July, October). Fourteen days' notice must be given. The fee is £30 unless the candidate desires to qualify to hold office, when it is £50. In the case of a licentiate of the faculty, £25 and £15 respectively.

The Royal College of Surgeons of Ireland grants the Fellowship after application made to the President and Council to be admitted to the examination. If the candidate is of less than ten years' standing he is examined (at the end of his third winter course of dissections) in anatomy, including dissections; physiology, and histology. For the Final, surgery, including clinical and operative surgery and surgical pathology are the subjects. If of over ten years' standing the subjects are surgical anatomy, surgery, and surgical pathology. The fees are about the same as at the other colleges.

THE GRADUATE'S WORK.

OPPORTUNITIES FOR THE QUALIFIED PRACTITIONER.

THE study to which the somewhat clumsy and cumbrous adjective "post-graduate" has been prefixed as specially distinguishing it from that with which the student is concerned before he qualifies, is one which, though it has, perhaps, a definite commencement has its ending only with the life of the student. Who can define what post-graduate study means? It is easy enough to say that it is definable as being "an interest in and a study of medicine and its allied sciences, not for examination purposes, but with the object of broadening and extending essentials already acquired by a graduate in medicine who is desirous of equipping himself more fully for his work in life." Such an explanation is no definition, and, indeed, it is unnecessary to attempt to define what we mean by the term "post-graduate study" when we preface all remarks about it by postulating that the medical practitioner, as the true scientist, must ever be a student, ever ready to say "I do not know but I wish to learn," and ever eager to make the most of such opportunities as are thrown in his way to perfect such knowledge as he may already have attained to, or to open to him new fields as interesting and as profitable to traverse as those through which he marched in his school days.

THE STUDENT GRADUATE.

Yet there are general practitioners, or men newly qualified, who take a more practical and somewhat less idealistic view of the nature of post-graduation studies. "Knowledge for its own sake" is not a motto which is usually honoured in practice in our utilitarian age. In his pre-graduation days the ordinary medical student has had a surfeit of useless, and for purposes of private practice in after life, wholly unprofitable work in amassing knowledge not even for its own sake, but often merely for the sake of satisfying examiners in a syllabus drawn up with a most illogical disregard for the comparative value of things and subjects. Once qualified the stress and strain of private practice are in many cases too great to permit of much leisure or inclination for special study. The specialism he desires is eminently practical. Hints that may be of value to him in diagnosis and treatment—less pathology and more therapeutics—to know what strychnine and camphor and ergot do for the sick man, not what they may achieve in the laboratory on the frog's heart, the unstripped muscle of the newt's intestine, or the comb of a barn-door fowl. That is the kind of work the qualified man will say appeals to him. To the few who are idealistic enough to see that "utility only" is a catchword which has its limitations and drawbacks, there are other attractive branches of study, directly or correlatively connected with the main subjects by means of which the practitioner wins his daily bread and butter. But it is not with these that we have to deal in writing about the post-graduate's work. An easy, and for all practical purposes, an accurate classification of the types of men who seek work and study after they have passed their final qualifying

examination is that which divides them into three categories or groups. Firstly, there are practitioners who, having qualified and obtained a diploma, wish to obtain further qualifications or degrees; secondly, there are those who wish to "specialise" in some subject or in a variety of subjects, in the hope that by so doing they may improve their chances of success. Lastly, but by no means the least important class, are those general practitioners who wish to amplify their experience, "to brush up their work," as they term it, and to become better acquainted with the latest developments in the various branches of the profession.

DEGREES AND ACCESSORY QUALIFICATIONS.

The practitioner who wishes to add to his list of qualifications or degrees has a more or less definite programme in front of him, from which the demands of the various examining bodies admit little, if any, divergence. These demands are clearly defined and exactly stated in most instances, and a summary of them will be found on another page in this issue. For the most part the facilities for study afforded by the various special classes, both at medical schools, by private tutors, and at certain hospitals, suffice for this class of practitioner, especially if, as is usually the case, study at such special courses is augmented by diligent home reading and a review of the candidate's own experience as given in his note- and case-books.

SPECIALISING.

The man who wishes to improve himself in certain subjects, either to become proficient in such subjects or because, as is very often the case, he has had little opportunity of studying more than their mere elements during his student days, stands on a somewhat different footing. We may take it that he rarely intends to specialise so exclusively as to become a consultant in that particular branch to which he devotes himself, for we are dealing throughout these articles with general practitioners, not with students who are ambitious of becoming leading lights of the profession. To the former a certain amount of extra proficiency in some speciality is often of inestimable advantage. A good knowledge of eyes or of ears contributes greatly towards the reputation of a man in a country practice where his colleagues are not averse to calling in his aid on occasions when the specialist, pure and simple, is unavailable. In a certain sense such a course of post-graduate special study is imperative. Few students, it is safe to say, have put on forceps, or done a venesection, or given an anæsthetic on their own responsibility before qualifying, and the majority of men gain their first opportunities in that way when they are doing locum tenencies, or, if fortunate enough to secure one, holding a house appointment. But for more advanced special work something more than casual instruction, however sound and however practical, is necessary. The graduate will have to attend special courses, select

special hospitals, and hold special appointments to obtain the requisite degree of confidence in his work and the necessary knowledge and experience which alone can warrant such confidence. Such a man must plan out his own programme, seeking for himself the best means of obtaining exactly what he wants. The facilities which are at hand are so numerous and so varied that no adequate enumeration of them can be given here. The process of selection and elimination is in some cases difficult, especially where the claims of different schools appear equally strong. In most cases the practitioner's own hospital will offer him greater scope in the way of securing appointments than he can elsewhere obtain: in others he may find a few months spent at a special hospital (such as, for instance, the Rotunda, the fever hospitals, or a sanatorium) of distinct benefit. Nearly all special institutions offer opportunities and chances to the man who is really "keen." At most of them minor appointments, entailing a three or six months' period of responsibility and permitting of solid work, are available. Such posts are of great value, and the practitioner who wishes to devote more attention to any special branch is strongly recommended to consider them very carefully.

THE CONSCIENTIOUS GRADUATE.

The requirements of the third type—that is, "the conscientious practitioner who, alive to his own limitations, wishes to do the best for his reputation, his patients, and his pocket"—are so real and so varied that they demand some detailed consideration, and we can do no better than repeat what we have already stated on a former occasion when dealing with this subject. The practitioner requires, in the first place, a practical experience which he can readily and directly apply to his patients' needs. He may be forgiven a not unnatural aversion to academic lectures, remembering his early student days and the work which was of the greatest service in his examination—the out-patient department. He requires that which books and the lecture theatre do not supply—namely, personal and practical acquaintance with the diseases of everyday life. In academic lectures he sees an expensive luxury which he cannot afford at present. His passive toleration of them is only equalled by his enthusiasm for a practical "tip" or a useful prescription. He enjoys a "good tip," and justifiably, feeling that he is acquiring in a concrete form the experience of a practical teacher. Laboratory and high clinical research he admires from a distance, but he welcomes a knowledge of the quickest, simplest, and most reliable method of demonstrating a "typhoid reaction," a blood-count, a sugar or albumin test, or the staining of a tubercle bacillus. He sees in his own practice occasional cases of aural suppuration, but he wishes to see groups of them in different stages and degrees of severity, to become familiar with their differential diagnosis, complications, and sequelæ, and the perfected details of treatment. He wants to know when and how to syringe the ears, to inflate the tympanic cavity, how to see the glottis, and to be able to appreciate what he does see. These things he views from a business aspect, and realises that contact with a prac-

tical teacher is a "solid asset" to him which can be applied in his own practice, yielding a substantial return in cash and "kudos." He wishes to be "up to date," yet while fully appreciating the value and fascination of an expert's lecture, he prefers to absorb it through the medical journals at his leisure; but he cannot see the "cream" of a large out-patient clinic in the weekly journal. "I know," says he, "that in functional aphonia the voice may be at once restored by the interrupted current, but in my last case I did not succeed; therefore I want to learn by practical demonstration why I failed." He has no desire to become an expert laryngologist, oculist, or aurist, but he wishes to become more expert. He prefers the conversational demonstration in which he takes a direct personal share to the more impersonal lecture. Finally, he requires his teaching so arranged as to interfere as little as possible with his regular work, and at a moderate cost pecuniarily.

"BRUSHING UP."

In addition, there is one type of man who has already had a fairly wide experience of clinical work, but who is sufficiently enthusiastic to consider the time spent in theoretical and practical study as not being wasted. He is essentially the man who wants to add to and improve his knowledge; to brush up and freshen his acquaintance with laboratory methods, with new instruments and appliances, and with the latest developments which have a practical value for him, and may render him real service in his work. It is only of recent years that this type of professional student has been fully recognised, and already there are so many excellent schools which make a special feature of their courses for him that he will not need to go very far in his search for aids and facilities. The Polyclinic and the West London Schools are excellent for such students, and the practitioner's own school will always be ready to welcome him back, and to admit him once more into the confraternity of students, to make him free once more of lectures, ward demonstrations, and, usually for a small fee, of practical laboratory work as well. In general the eager practitioner who returns to his old haunts in quest of more information is a valuable asset to the medical school, not often, unfortunately, recognised as such. His practical experience is often of service in the wards, and his influence on younger students is invariably for good. On the other hand, by mixing with men so much his juniors in years and in professional understanding, he also gains in no small degree. For that reason it is of mutual benefit to himself and to his school if he elects to return. Schools specially designed for graduates have, of course, their advantages, and every graduate who undertakes special study should decide upon becoming a member of one of these schools. There he meets with men of his own years, with tastes very often similar, and with aspirations often analogous, to his own. There, too, he may revive old friendships and knit new ones. But by belonging exclusively to such a graduate club, as one may term it, and by neglecting the opportunities offered him by his own hospital, we incline to believe that he loses certain advantages which would have been of material value to him.

WHAT STUDY ABROAD HOLDS OUT FOR THE GRADUATE.

Continental Schools.

THE benefits which the graduate may gain by spending a few months or weeks at some Continental centre are many and important. The change of climate, scenery, and environment generally will react beneficially upon him; the study of the language, manners, and customs of his new hosts will be a matter of daily interest to him. At the schools he will meet with new methods of treatment; he will find prejudices existing against certain methods which he thought were as firmly fixed on generally accepted principles as the theory of the circulation of the blood or of the revolution of the earth round the sun; and he will find also methods in use which in his own school his teachers had taught him were absurd and valueless. If he is unsympathetic, insular, and aggressive he will reject at once what he hears affirmed. To him Sayre's bandage will remain for ever superior to Hennequin's, which the French hospitals use, and strychnine eternally the superior of camphor in heart failure. But it is not to the unsympathetic, aggressive, insular graduate that we recommend foreign study, for he will gain little from it save material enough to strengthen and confirm him in his dislikes. To the man who can discriminate, who can nicely weigh the pros and cons of two methods of treatment, neither accepting the one because it is home-grown and endemic, and therefore superior to everything else, nor rejecting the other because it is foreign, outlandish, and therefore bound to be wrong; who can, above all, judge sympathetically, going by results not by alleged reasons, such a course of study cannot but prove of the greatest possible value.

PRELIMINARY CONSIDERATIONS.

Before venturing to attach himself to a foreign school the graduate will have to consider very carefully the question of language, residence, time, and expense. Usually only a three months' course at the most can be indulged in, and most students will have to be satisfied with a much shorter course. A great deal, however, may be accomplished even in that limited period. Many a man does excellent work abroad during his annual holiday, and a visit to a hospital or a morning's attendance at a foreign clinic will, in default of other opportunities, prove useful to the graduate. The question of expense is not a very important one. In all the great medical centres of the Continent living, for the student at least, is inexpensive. Cheap lodgings and board can be had at prices ranging from 12s. 6d. to 35s. per week, and for short visits the pensions and smaller hotels do admirably. The fees payable for attendance at classes and demonstrations are generally very much lower than those paid for corresponding classes in England, and extras, on the whole, do not total up to much. Where two or more friends share expenses the cost of a foreign course may be very much reduced. The language question is one which the graduate should consider carefully. In most of the large Euro-

pean hospitals English classes are held, during the vacations, for foreign graduates, mainly English and American. The professors usually know and talk English, and the demonstrators make a point of learning the language. But the graduate would be well advised to drop for the time being his home language along with his old text-books, and whatever old prejudices he may have gathered together during his student days, and to apply himself seriously and whole-heartedly to mastering the language of the out-patients at the place where he is studying. German and French and Italian are not very difficult languages to acquire, and a knowledge of one of the three will be of invaluable assistance both while abroad and afterwards.

France.—In France the opportunities for English Most of the hospitals are open to foreign graduates on payment of special fees. For an ordinary visit or attendance at a demonstration the production of the visitor's card is usually quite sufficient. The following hospitals have special lectures and classes, particulars of which may be obtained on application to the respective Deans:—Paris: Hôtel-Dieu, 560 beds; La Pitié, Charité, Necker, Lariboisière, Beaujon, Laennec, Andral, all general hospitals varying from 300 to 800 beds; Saint-Louis, Midi, Lourcine, Clinique, Maison de Santé, Trousseau, Pasteur, special hospitals with from 100 to 250 beds. The clinical staff attached to these are members of the Faculty of Medicine of the University of Paris, and full notice of lectures and demonstrations are usually posted on the hospital walls. At French hospitals out-patients are seen from 7.30 to 9 in the morning; operations are usually in the morning, and demonstrations and lectures soon after noon. In Paris special classes are held in forensic medicine and medical jurisprudence, and the introductory lectures to the various courses in surgery, medicine, and midwifery are usually exceptionally instructive. Excellent courses are given at some of the provincial centres in France. Caen and Lille, both university towns, attract many English students. Orleans and Marseilles possess good hospitals where foreign graduates are allowed to study.

Germany.—All the German Universities extend their cordial hospitality to graduates of sister universities and to diplomates of learned societies. In Berlin, Erlangen, Halle, Tübingen, Würzburg, Bonn, and, above all, in Heidelberg, the student will find himself soon admitted to the full into the privileges and rights of the ordinary abiturient. The professors are invariably extremely courteous: they go out of their way to help and assist the stranger, and they put willingly at his disposal, for purposes of study, their wards and their lectures. At most of the better-known centres special classes are held for foreign students: these classes are essentially "post-graduate" classes; they are practical and sometimes include laboratory work. For pure medicine the graduate will probably find himself best catered for

at Munich and Berlin: in surgery Halle and Heidelberg offer excellent opportunities to the student for becoming familiar with German methods of work. For research work Germany offers unrivalled opportunities.

Austria.—Vienna, Prague, and Innsbruck cater for the American and English graduate by advertising special classes in otology, ophthalmology, laryngology, and allied subjects during the vacation. These vacation courses are held at the various special clinics, by some well-known expert who usually lectures and demonstrates in English and allows students to do practical work under him. The fees for such vacation courses are a trifle higher than those charged for ordinary courses. Living in Vienna is somewhat more expensive than at other centres, and the English student community there is usually large, Americans being specially well represented.

Italy.—No special facilities are put in the way of the foreign student, but he is always welcome at every university and in every hospital. At Milan the unrivalled Ospedale Maggiore well repays a few weeks' study. At Rome, Turin,

Florence, and Venice there are excellent hospitals and periodical courses of lectures on certain subjects, which may be attended on production of evidence of registration or on payment of a fee. As in Paris, a speciality is made of medico-legal study, and as has already been said the clinical teaching and pathological demonstrations are excellent. At the large new hospital at Rome special post-graduate classes are now being held.

Switzerland.—Centres to be recommended are Basle, Zurich, and Berne, at each of which vacation courses are held.

Holland.—No facilities are extended to the graduate, but, as in Italy, he is everywhere courteously made welcome. The best clinical teaching is to be found in Amsterdam, Leyden, and Groningen.

Russia.—As a field for post-graduate study Russia has possibilities, but they are not sufficiently well-known or attractive to appeal to the average graduate. At St. Petersburg alone does the foreign student obtain special facilities for such study, but there he enjoys unrivalled opportunities for studying special subjects. The teaching in surgery, midwifery, and orthopædics is specially good in Russian centres.

THE MEDICAL DEPARTMENT OF JOHNS HOPKINS UNIVERSITY.

THE undergraduate department is planned for the training of those who have received a liberal education. A collegiate degree in arts or science from a recognised university or college is necessary for admission. In addition to this the applicant must have a reading knowledge of French and German, with an adequate training in the preliminary scientific branches, such as chemistry, physics and biology. The course extends over a period of four years, the term being eight months—from October 1 to June 1. The students proceed to the degree of M.D.

Throughout the course special emphasis is laid on practical work in the laboratories and the hospital, which is regarded as an integral part of the medical school. In the first two years of the course anatomy, physiology, physiological chemistry, pharmacology, and toxicology, pathology and bacteriology are taken up. In the final years the hospital—both the wards and the out-patient department—is the class-room. Didactic lectures are few, and practical instruction is given to small groups as far as possible. The fourth-year students spend a large part of their time working in the wards as clerks and dressers. Beginning with the session of 1907 some elective courses will be given in the final year, the student having certain freedom of choice in deciding which of the special subjects he will take.

The courses for graduates are of two kinds: (1) Special and (2) University courses.

(1) The Special courses are usually given during May and June of each year to limited classes. They embrace courses in medicine (clinical work, classes in physical diagnosis and clinical microscopy), operative surgery on animals, surgical pathology, pediatrics, orthopædic surgery, genito-urinary surgery, x-ray diagnosis, gynecological pathology, cystoscopy,

ophthalmology, etc. These courses are practical as far as possible, and are designed specially for general practitioners.

(2) The University courses differ from these in that they are given throughout the session. These are of two kinds—elementary and advanced. The former are much the same as the work being done by the undergraduates, and are usually for periods of three or six months. In all of these the number who can be admitted is necessarily limited, and applicants must satisfy the head of the department of their fitness to profit by the work. Thus elementary courses are given in medicine, pathology, bacteriology, physiology, gross anatomy, neurological anatomy, and physiological chemistry. For the advanced and research courses only those physicians are accepted who are prepared to undertake special studies and to spend sufficient time to make their admission worth while. Thus, in medicine, work may be done in the various laboratories of the medical clinic, *e.g.* the general clinical laboratory, the biological laboratory which investigates biological methods of diagnosis and treatment, the physiological laboratory, and the bio-chemical laboratory. In the Phipp's Dispensary there is a laboratory for the study of the problems of tuberculosis. In the pathological department courses on special work, such as the pathology of the organs of special secretion, are given. A limited number are admitted for research work. In the anatomical and physiological laboratories a few selected men are admitted for advanced work, as, for example, in the anatomy of the nervous system, embryology and physiology. A similar course is available in physiological chemistry. In all of these the fitness of the applicant is decided by the head of the department.

TROPICAL MEDICINE.

THE recent advances in our knowledge of tropical diseases have rendered it imperative that special teaching by experts should be given to young graduates about to take up their different spheres of work in the various colonies. Thus have arisen, in most of the countries that possess tropical dependencies, special schools of training usually designated Schools of Tropical Medicine. In dealing with the general question of the value of instruction in tropical medicine we may divide graduates into three classes: (1) Those who do not intend to practise abroad, *i.e.*, who will spend their life in England; (2) those who intend to practise abroad and who are leaving England for the first time; (3) and those who have resided and practised in the tropics for longer or shorter periods, and who have had either (*a*) special instruction before going abroad; or (*b*) no such instruction. Each of these classes must necessarily vary greatly from the others in its needs, and it will conduce to clearness, therefore, to discuss them separately.

WHAT IT IS.

Before, however, commencing this discussion let us define what tropical medicine really means, and how it differs clinically and practically from the general medicine taught in the ordinary medical schools. As regards the first, the clinical aspect, there is not much to say; the methods employed are the same, but in the tropics, besides almost all the ordinary diseases of temperate climates, there are some peculiar forms, which are difficult to see and study at home.

PRACTICAL ASPECTS OF TROPICAL MEDICINE.

As regards the second, the practical aspect of tropical medicine, we find much the same applies; the methods are again similar, the blood has to be examined in just the same way, bacteria have to be grown and studied, and so on. Where the difference comes in is that certain tropical diseases have as their causative agents peculiar parasites, often of a protozoal nature. Further, besides an elementary knowledge of protozoology, helminthology, and entomology must be mastered by the would-be tropical expert, and this alone at once differentiates the scientific medicine of temperate climates from that of the hotter regions. This blending of the study of pure zoology with that of medicine is the most striking feature that has occurred in medicine within recent years. It has resulted in the production of voluminous volumes on mosquitoes and other insects previously hardly known or mentioned, and it has thrown fresh light and interest on the complicated study of the protozoa, raising that subject to a height of interest almost exceeding that of bacteriology. This of itself is sufficient to indicate a necessity of special instruction, and it places the practical side of tropical medicine at least on a plane with special subjects

such as bacteriology, in which, of course, post-graduate teaching is often required.

ITS VALUE TO THE GRADUATE.

Having explained, then, what the term tropical medicine means, we may return to the question of its value for the three classes of graduates, mentioned at the beginning of the paper. We have, taking them in the same order (1) graduates who do not intend to practise abroad, *i.e.*, who will spend their lives in England. Do these require a special course of instruction in tropical medicine? It may at once be said that they do not, because an ordinary general practitioner sees only an odd case or two of tropical disease in the course of his life. Further, it must be remembered that a considerable amount of teaching is carried out on this subject in the ordinary medical and pathological courses given to students, and this is quite sufficient for the majority. What good, for example, would it be for a doctor, say, in some country district, to be specially coached up as a young graduate in the differences between a culex and an anopheles mosquito, or how to tell a tsetse fly from a tabanus, when he would never encounter such an insect for the rest of his life? There is, however, another class of graduate: young men, keen on keeping up-to-date in all the recent scientific work, who are reading for higher examinations, or have ambitions to get on the staff of a hospital; to them a special course of instruction in tropical medicine will prove not only interesting, but useful, as they may in their future consulting work find knowledge of tropical diseases, parasites, and infecting agents of great advantage, and it will certainly prevent them from falling into the ludicrous and serious mistakes that are so often perpetrated by leading authorities in dealing with cases from abroad. So many invalids are constantly coming from our colonial possessions to London that it is almost essential for the ordinary consultant to know something about tropical medicine, as they often find their way to him, even though there are now special consultants on tropical diseases.

ITS VALUE FOR THE COLONIAL PRACTITIONER.

When we turn to our second class, "graduates who intend to practise abroad and who are leaving England for the first time," then the answer to the question, "Do they require a special course of instruction in tropical medicine?" is a very simple one: it is "Yes, emphatically they do." The young graduate, let him be clever or the reverse, let him have assimilated all the teaching bearing upon tropical diseases he has had placed before him as a student, let him have mastered blood diseases and bacteriology, still requires the special instruction given at schools of tropical medicine before he sets out for abroad. If he belong to the category of the clever, he will quickly pick up the new work; he will see some clinical cases (a point to be returned to later), and, armed with his microscope, at the end of his training he will be competent to give an accurate diagnosis on at least the commoner forms of tropical

disease. If he belong to the category of the backward, still more is it essential that he should be trained, drilled, and coached before he is set at liberty to handle the lives of white people abroad, because, as so often happens there, he is absolutely alone, and has no one to turn to to advise or assist him. It is hardly necessary to emphasise this point further. The Navy, the Army, the Foreign Office, and the Colonial Office all insist now that their medical officers shall have instruction in tropical diseases before they take up their appointments, and this clearly shows the value they set on such instruction. The Army and Navy have their own schools of instruction, Colonial medical men are sent to the schools of tropical medicine at London or Liverpool, and these also afford facilities to private students, missionaries, and men taking up posts such as railways, mines, or other similar situations afford. Most of these latter companies now will give the preference to a medical man who can produce a certificate of a course of instruction from one or the other of the schools, and much the same applies in Germany, France, Portugal, and other Continental countries.

THE LONDON SCHOOL OF TROPICAL MEDICINE.

It may interest intending applicants for Colonial or other posts in the Tropics if one gives a short *résumé* of what the course of instruction at the London School of Tropical Medicine consists of, and how long it lasts. The sessions extend over three months each, and there are three a year; the Colonial Office requires that men selected for posts in the tropics should attend one such session, and, in addition to exhibiting regularity in attendance, should pass the examination at the end of the course. Failure to do so involves loss of the appointment. Other students may take the examination or not, as they choose, and, if successful, get a certificate to that effect. The courses qualify, and are useful preparations, for the Diploma of Tropical Medicine and Hygiene granted by the University of Cambridge. It has been argued that three months is not sufficient time to train men in, and six months' courses have been suggested. There are difficulties in the way for such extension, especially in the case of men on leave from abroad who are desirous of taking out a session, and, after all, as the student is required to attend from 10 to 4 or 5 daily during the three months, this is really equivalent to an ordinary two hours' course of six months. The instruction is divided into three headings: (1) the practical work in the laboratory, by far the most important and useful of the three; (2) clinical instruction in the wards and the demonstration of cases; and (3) systematic lectures. Under the first heading the student is trained in hæmatology, protozoology, bacteriology, entomology, helminthology, pathology, and morbid anatomy; the tuition is eminently practical, the student preparing, staining, and mounting his own specimens, so that when he completes his studies he has in possession a very complete set of specimens, which serve him as standards for the future.

Under the second heading comes the clinical instruction in the wards: the paucity of cases is a serious drawback in this part of the

teaching, though, of course, one case studied thoroughly is much more important than many simply glanced at, but still at the same time this is a real defect, and one which it is difficult to remedy. In other ways also more use might be made of the clinical material, because after all the majority of the men who go abroad go as general practitioners who have to make their living at practice, not as scientific specialists who go in the hope of making some far-reaching discovery that will startle the world.

Under the third heading, "Systematic lectures," little need be said. They are too numerous, and are not of much use, because most of the work covered in them has already been thoroughly gone into in the laboratory in the practical course. Having shown, then, the extreme value and necessity for such a course for all graduates who may possibly be called upon to follow their profession outside these islands we may pass on to our next class—(3) graduates who have resided and practised in the tropics for longer and shorter periods, and who have had either (a) special instruction in tropical diseases before going abroad, or (b) no such instruction. For convenience let us discuss (b) first. There are many of those, some in the Colonial service, others in private practice, who on their return home on leave desire to brush themselves up in recent work. It will entirely depend, of course, on what they want to see and do. Some may want to brush up their surgery, others their special subjects, such as ophthalmology or diseases of the throat, while others, interested in blood and microscopical work, may find it more useful to attend one of the tropical schools to get the special work taught there—work which was in its infancy more or less when they left those islands in their youth. There are many varieties, therefore, in this class, and each must judge for himself what is best for him to do. Under heading (a) we now have numerous graduates, who have passed through the tropical schools or naval and army courses of instruction and are returning home on leave from time to time. Here again it will depend on what the individual's speciality is abroad. To this class the tropical schools will not appeal. What they require is post-graduate work of various sorts, and various institutions where the post-graduate can get short courses on surgery, medicine, recent research on tropical medicine, bacteriology, hæmatology, the special senses, x-ray study, with plenty of clinical and pathological work, supply this need, and, as a result, are much favoured by this special class of graduate.

Our last variety of graduate is the man with scientific leanings who comes home on leave, and wishes perchance to devote himself to some special branch of science or some special disease. Few places are open to him, but Liverpool, or rather the Liverpool School of Tropical Medicine, will receive him willingly, and, if he has ability, will probably get him a post on one of their numerous expeditions. A vast amount of research has been accomplished there in addition to the ordinary tropical courses for the younger graduate, and any man from the tropics who wishes a helping hand in this direction cannot do better than go there.

THE ARMY, THE NAVY, AND INDIAN MEDICAL SERVICE.

THE INDIAN MEDICAL SERVICE.

IN a recent number of the *St. Mary's Hospital Gazette*, Captain Brodribb, I.M.S., discusses, in a short and interesting article, which the intending candidate would do well to read, the pros and cons of the service. "For the poor man," he decides, "the service is a great investment. By the expenditure of £100 on uniform (which can be paid after entering the service, if need be) he is able to secure an income which, taking the pension into consideration, cannot be put at less than that of a practice of £800 to £1,000 a year—that is supposing he never does anything great in the service. . . . Life for a single man in cantonments, with a pony, mess, and club bill, costs about 350 to 400 rupees per month, while leave costs anything you like to spend on it. . . . Married life is, of course, much more expensive. . . .

"The life at first is often a very lonely one, with perhaps one or two other white men in an enormous district; but the junior man in civil generally draws more than the man of the same service in military, and of course there are stations for the more senior ranks which, if he gets them, bring in a large income, though these are few and far between, and the work extraordinarily hard and wearying in this climate. Still, a man must not expect to get Rx.200 to Rx.1,000 a month for doing nothing. There are other branches, as under the Foreign Office; working in Native States; gaols; essay; botanical, research, military administrative posts; staff of medical colleges all with their advantages and disadvantages. Nowadays it takes about three years (for gaols) to eight years (for the best provinces) to get out of the military into these branches, but you may, up to three years after leaving it, elect to return to your own regiment if you are *pukka* with the regiment; so it is well to get *pukka* with your regiment before leaving it, otherwise you would have to return to the bottom of the officiating list. To get *pukka* (that is, actually appointed, and not attached) in the regiment will take four to five years.

"Now let us see what is to be said on the other side, that is, against the service. Most important, perhaps, is the country itself; it is not a white man's country, and as long as you stay you never get accustomed to the fierce heat of the Indian summer. There are few things more deadly than a series of really hot Indian nights, when sleep becomes out of the question, and one gets up in the morning weary in body and soul. The new arrival is the happiest, enjoying many things that he did not get at home; lengthy if bad dinners; lots of servants; authority out of all proportion to what he had at home; more means and less work; during the middle of his service he yearns for home; at the end of it he has become separated from home ties; has lost energy and interest, and often becomes a time-server unfitted for any other walk in life.

"Influence plays a great part in a man's career in India; without it, it is likely that he will never get a chance."

He sums up by declaring: "I think it is the best service in the world, comparing favourably with

private practice in England. It offers no real chance of failure, has few responsibilities, many and varied branches to choose from, a certain living to death, and, if married, a competence which can be increased by insurance for those that remain behind."

Candidates must be natural-born subjects of His Majesty between 21 and 28 years of age at the date of the examination, of sound bodily health, and in the opinion of the Secretary of State for India in Council in all respects suitable to hold commissions in the Indian Medical Service. They may be married or unmarried. They must possess, under the Medical Acts in force at the time of their appointment, a registrable qualification to practise both medicine and surgery in great Britain and Ireland.

After passing examination, the successful candidates will be required to attend one entire course of practical instruction at the Army Medical School and elsewhere, as may be decided, in:

- (1) Hygiene; (2) Military and Tropical Medicine;
- (3) Military Surgery; (4) Pathology of diseases and injuries incidental to Military and Tropical Service.

This course will be of not less than four months' duration.

THE NAVY.

This service is only open to the graduate of European birth between twenty-one and twenty-eight years of age. He must pass an entrance examination and gain at least one-third of the possible marks. Successful candidates immediately after passing the examination will receive commissions as surgeons in the Royal Navy, and undergo a course of practical instruction in naval hygiene, the diseases of warm climates, bacteriology, surgery of gunshot wounds, etc., radiography, and the photography in connection with it at Haslar Hospital. Surgeons are only required to provide themselves with a regulation case of pocket instruments, a stethoscope, and three clinical thermometers. All other instruments are provided at the public expense.

Every medical officer will be required to undergo a post-graduate course of three months' duration at a metropolitan hospital once in every eight years (should the exigencies of the service permit), and this as far as possible during his surgeon's, staff surgeon's, and fleet surgeon's period of service. While carrying out this course the medical officer will be borne on a ship's books for full pay, and will be granted lodging and provision allowances, and travelling expenses as for service under the regulations to and from his home or port; the fees for each course (not exceeding £25) will be paid by the Admiralty on the production of vouchers at the end of the course. The medical officer will be required to produce separate certificates of efficient attendance in the following: I. The medical and surgical practice of the hospital; II. A course of operative surgery on the dead body; III. A course of bacteriology; IV. A course of ophthalmic surgery, particular attention being paid to the diagnosis of errors of refraction; V. A practical course of skiagraphy.

THE ARMY.

A candidate for a commission in the Royal Army Medical Corps must be 21 years and not over 28 years of age at the date of the commencement of the entrance examination. He must possess, under the Medical Acts in force in the United Kingdom at the time of his appointment, a registered qualification to practise. He must pass an entrance examination, and, having gained a place, must undergo two months' instruction in hygiene and bacteriology, and afterwards proceed to Aldershot for instruction in technical duties of the corps.

PUBLIC HEALTH WORK.

The Diploma in Public Health is a qualification which will prove of undoubted service to the graduate who desires to apply for an appointment under the Health authorities.

A medical officer of health of any county, or of any single or combined district with a population at the last census of 50,000 or more, or of any metropolitan district, or the deputy of any such officer, must be legally qualified for the practice of medicine, surgery, and midwifery, and must either be registered in the "Medical Register" as a holder of a diploma in sanitary science, public health, or State medicine, under Section 21 of the Medical Act of 1886, or must have been, during three consecutive years preceding the year 1892, a medical officer of a district or districts in London or elsewhere with a population according to the last census of not less than 20,000, or must have been, before the passing of the Local Government Act of 1888, for not less than three years, a medical officer or inspector of the Local Government Board.

It is advisable to obtain the diploma early, and then to try and obtain an assistantship to an officer in charge of a large borough district. Diplomas are granted by nearly all examining bodies. The Conjoint Board of England grants a diploma in public health. The Universities of Oxford, Cambridge, Durham, Liverpool, Manchester, Sheffield, and Leeds grant diplomas in hygiene and public health to their own graduates or to graduates of sister universities, and in some instances also grant diplomas to qualified practitioners who may not be graduates. The requirements for each diploma varies, but particulars may usually be obtained on application to the various registrars. The most popular diplomas appear to be the Cambridge D.P.H. and those granted by the University of Durham. For both the candidate must

be a registered medical practitioner and must have attended special courses of instruction at recognised centres or with recognised teachers for a specified period.

The Conjoint Board of Scotland requires candidates to produce evidence of attendance (subsequent to obtaining a registrable qualification) for six months at a Public Health Laboratory, and for six months under a Medical Officer of Health of a county or of a large urban district. There are two examinations, and candidates may present themselves for both of them at one period or for either examination separately. The fee is £12 12s., or £6 6s. in respect of each examination; and candidates referred are readmitted on a fee of £3 3s. in respect of each examination. The examination is held in Edinburgh or in Glasgow, there being two periods of examinations yearly—October and May. Applications for examination in Edinburgh to be sent to Mr. James Robertson, 54 George Square, Edinburgh; and in Glasgow to Mr. Alexander Duncan, B.A., LL.D., 242, St. Vincent Street, Glasgow, not later than fourteen days before the examination day. The University of Dublin confers degrees after examinations upon M.D.'s or graduates in Medicine and Surgery of Dublin, Oxford, or Cambridge, and the Royal University only on graduates of Medicine of that University. The Conjoint Examining Board grants diplomas after examination to candidates who have complied with the regulations of the General Medical Council.

The University of Edinburgh grants a diploma in tropical medicine and hygiene. The examinations are held in January and July. The fees for the first and any subsequent appearance are: Practical bacteriology, £1 1s.; diseases of tropical climates, £1 1s.; tropical hygiene, £1 1s.; tropical clinical medicine, £1 1s.; total, £4 4s.

LITERARY WORK.

THERE is a wide scope for the medical man who has literary aspirations and who desires to contribute to the medical press, or to augment his income by devoting his leisure time to medical literary work. Needless to say, literary work for the medical man is as onerous, as hard, and as disappointing, until an effective start has been made, as it is for the literary layman. So much is daily written that is, from a literary point of view, comparatively worthless, that there appears to be an impression in the minds of most that the style of writing does not matter so long as the subject is of professional interest. No greater mistake can be made than that. An article which is attractively written bears its own commendation, and a little attention paid to points of style and treatment generally brings its own reward. All the medical papers accept articles of professional interest: a few, like THE HOSPITAL and some American medical journals, pay ordinary newspaper rates for accepted contributions. Suitable articles are also accepted by the lay press, in which case the remuneration is often far higher than that given by the professional journals. All articles forwarded

for consideration should be typewritten or, at least, clearly penned with a wide margin, and it should be a rule of writers never to forward a contribution without a stamped and properly addressed envelope for its return in case of unsuitability.

Both for literary and research work the graduate must have access to good libraries, and in every centre there are excellent collections of books and papers which are available for reference. In London the reading-room of the British Museum is open to practitioners, who may obtain a reader's ticket, usually for three months, on making written application to the Director. The library of the Royal College of Surgeons, Lincoln's Inn Fields, is open to all practitioners who are fellows or members of the College, and to students and others who have a card of introduction from a fellow or member. The libraries of the Royal Medical and Chirurgical Society and of the Royal College of Physicians is available to readers provided with an introduction from a member. The valuable collections in the Bodleian Library at Oxford, in the Royal College of Surgeons, Edinburgh, and at Dublin, are open to graduates on application to the Librarians.

GRADUATES' MEDICAL SCHOOLS.

WEST LONDON POST-GRADUATE COLLEGE.

By COLONEL CLUTTERBUCK, M.D., B.S., M.R.C.P., Honorary Physician St. Marylebone General Dispensary.

THE West London Hospital, Hammersmith, was the first of the general hospitals in London to reserve its practice strictly for qualified men, and to establish a post-graduate college as an integral part of its constitution: the fame of the College has undoubtedly spread to corners of the earth where, but for its existence, the hospital would have remained unknown: the child has, in a sense, overshadowed the parent. As one who has been intimately connected with the college and hospital for many years, and who has had perhaps more experience of teachers in the medical world than usually falls to qualified men, I feel justified in expressing my deliberate opinion that the College still retains the pride of place among similar institutions which it necessarily, from priority of inception, occupied at the commencement of its career. Nor is there any reason for supposing that its utility will not be further increased. Facilities for post-graduate medical instruction are now being largely introduced in the provincial centres, and I feel sure many valuable hints might be obtained by bodies contemplating such institutions from acquaintance with the principles and methods pursued at Hammersmith: while the provincial man who has not as many opportunities as he might wish for visits of inquiry to the metropolis, will carry away many hints and much information, if he is enabled at any time to put in a spell of work there.

Almost the first thing that strikes one on looking over a recent prospectus is the variety of the topics dealt with in one session's work. Our needs and interests are not all alike, but in whatever direction they may lie I may safely say they will be found fully catered for here.

The hospital itself contains 159 beds, and the advantages of the direct connection of the college with the wards and out-patient work are too obvious to need even a reference, but some special features may be emphasised. As regards surgery, for instance, the staff are willing and ready to make use of the assistance of post-graduates in performing operations; the advantage of this privilege is very great to men who perhaps have not many opportunities for dealing with major operations, but who nevertheless occupy positions where they may be at any moment called upon to undertake them. Especially does this apply to the large and important branch of abdominal surgery, which has been revolutionised within the past few years. New operations and treatments are, of course, practised.

I may here mention that the hospital is recognised by the Royal College of Surgeons as an institution where candidates (who need not be Members) for the Fellowship can spend the necessary year of study after obtaining a registrable qualification, while the college and hospital are also recognised by the naval and military authorities as regards study leave.

Members of the college may also accompany the resident staff on their visits to the wards, and so have opportunities of refreshing their recollections of such procedures as lumbar puncture, with cyto-diagnosis, and gastric lavage, with chemical and microscopical examination of gastric contents. In the theatre post-graduates may, under the direct supervision of the anæsthetists of the staff, administer anæsthetics in major operations; most men would prefer to try a new anæsthetic, as, for instance, ethyl-chloride, under such conditions, rather than by themselves from merely book knowledge. The effect and manner of employment of the ever-increasing number of drugs used for producing local anæsthesia can also be studied to advantage.

The out-patient departments necessarily resemble in their main features those of other general hospitals, and the staff are always alert to discover, and, when found, to demonstrate, any cases of exceptional interest, or, what is of equal importance, any points of special interest found in cases of the more common diseases. There is one branch of out-patient practice where even the numbers of themselves constitute a valuable element in instruction. I refer to skin diseases. Everyone knows how difficult minor differences in persons suffering from the same condition sometimes make diagnosis, and those who are not satisfied to put every condition to which they cannot at once give a specific name into the rubbish heap of eczema will appreciate the value of the mere multiplication of cases with the advantage of having them clearly expounded by an expert. Another such branch is that of the infants' and children's clinic: if any fault is to be found here it is that it is too large, leaving an impression that one could profitably spend more time in examining fewer cases. The increasing attention paid to pædiatrics makes it difficult to give up too much time to this study; for it is almost an axiom that in general practice a competent and sympathetic treatment of children is one of the broad roads to success. In the out-patient clinics post-graduates are asked questions, if they wish; a valuable form of instruction for men intending to sit for examinations. All cases may be fully examined in the rooms provided for the purpose. In the gynecological department, too, examinations necessarily restricted in private practice are part of the routine work. In all these departments clinical assistants are appointed from post-graduates desiring to hold such positions. The electrical department is fully equipped for diagnosis and treatment; an x-ray department and baths are also provided. Leading off the out-patient rooms is a dark room for ophthalmoscopic and laryngoscopic work. All through the year lectures are given daily, except Saturdays, in the afternoons, on practical medicine and surgery in all their branches. There are also short courses on tropical diseases, and on mental diseases by men who have made their mark in those

subjects. These lectures are quite distinct from the clinical demonstrations in the wards by the physicians and surgeons, and may be attended without any additional fee. I would also mention the pathological department. The specimens are specially selected for their value from an instructional point of view, and the demonstrations of naked-eye and microscopical specimens are very thoroughly carried out.

A prominent feature in the arrangements of the College is the provision made for instruction of small classes in every branch of practical medicine. Such classes are formed every session in connection with diseases of special regions, such as eye, throat, skin, etc.; for the clinical examination of blood and urine; in bacteriology and medical microscopy generally; in applied anatomy, administration of anaesthetics, intestinal surgery, cystoscopy, x-ray work, etc. For these classes, each of which is strictly limited to a small number, additional fees are required, as they are practically individual and tutorial. The ordinary fee for membership covers attendance at all general lectures and at all the routine practice of the hospital, whether in the general or special wards or departments. Autopsies can, of course, be attended. Arrangements can be made through the College authorities for special coaching should it be desired.

The West London Medico-Chirurgical Society holds its meetings in the hospital. The subscription is very small, and there is no entrance fee; post-graduates are invited to become members; a quarterly medical journal is sent free to each member; in it are published lists of gentlemen attending the hospital and other college news.

Rooms are provided for members where they may read, write, and smoke, and consult books of reference; tea can be obtained in the reading-room; lockers are provided at a small rent for those who

wish to keep books or such articles at the College. The medical library of the West London Medico-Chirurgical Society is housed in the College, and post-graduates have the use of the books and periodicals; for a small subscription they can borrow and take home books; any medical book not in the library can be obtained in 24 hours; in addition lay papers and journals are supplied, the cost of which those using the rooms are asked to help to defray.

The hospital is very accessible; it is within two or three minutes' walk from stations on the District and Metropolitan Railways and the Piccadilly Tube; the terminus of the Central London Railway (Twopenny Tube) at Shepherd's Bush is about twelve minutes' walk from it. In the other direction Barnes, Chiswick, and Kew are all within easy reach. Good lodgings are obtainable in the neighbourhood, a list of addresses being kept by the Secretary of the College. An annual dinner is held of past and present members of the hospital and college, and an annual conversazione is given by the staff, at which all gentlemen who have been connected with the College are welcomed.

We live, however, in a commercial age, and some of us are apt, perhaps too apt, to appraise the value of a thing by its admitted monetary value; it happens that an indirect test of the latter may be legitimately applied in this case. Members may join for any period from one week up to the term of their natural lives, the fees ranging from one guinea to £25. Some few years ago it was considered expedient to increase the fee for life membership, and this enhancement was carried out and remains in force without any resulting diminution of membership. I believe it is proposed, when circumstances are favourable, to enlarge the existing institution by building additional premises, so the College may be expected to have an extended sphere of usefulness.

THE LONDON POLYCLINIC.

THE Medical Graduates' College and Polyclinic, to quote its full title, has now a well-recognised position among the medical educational organisations of the metropolis. As is implied by its name, its object is to provide opportunities for clinical and practical study for those who have already gained a position on the medical register. From the outset, two principles have been recognised as essential to a large and broad scheme of post-graduation study. First, that such a scheme should be entirely separate and distinct from the ordinary educational course of the medical student. Secondly, that the teaching should not be confined to the staff of any individual hospital, but should include capable and distinguished representatives of all schools. Hence, at the Polyclinic, the needs of the practitioner receive full consideration, and the teaching in a very special manner represents the work of many of the best-known physicians and surgeons in the metropolis. It is this broad and comprehensive platform which makes the institution one of peculiar value to those anxious to come into contact with the latest and best work of the day.

Coming now to details, there is first to be noted

the afternoon clinics. These are conducted daily, and they offer very exceptional and valuable opportunities. Medicine, surgery, and each of the more special branches of practice, has its appropriate day. Selected cases are demonstrated and made the subject of clinical comment, and opportunities for personal examination by those attending the clinique are offered. In this way, and in a comparatively short period of time, the practitioner is able to overtake a large quantity of interesting and instructive clinical material under the direction of teachers specially qualified in each of the various departments. Indeed, it is difficult to imagine any scheme more suitable for those who are anxious to increase their clinical experience both in general and special work. On four days of each week there is also a lecture, and here teachers from the provincial as well as from the metropolitan schools take part in the programme. The range of subjects may be said to cover the entire professional field, and in many instances the "lecture" assumes the form of a lantern demonstration or of a discussion of selected pathological or clinical specimens. Thus the practical note is maintained throughout. With a view to render these oppor-

tunities accessible to all, the annual subscription, which includes admission to all clinics and lectures and also the use of the library and museum, has been fixed at one guinea. In addition, the *Polyclinic Journal* is issued monthly, and is sent free to all subscribers; and in the college laboratory specimens are examined and reported on for small fees. Another part of the Polyclinic scheme, and one of great importance, is the provision of "practical classes." It is recognised that many practitioners have not had adequate opportunities for equipping themselves with the more recent methods of clinical investigation, and an attempt is therefore made to meet this want in the classes to which reference is now made. Included in this division, instruction is provided in the use of the ophthalmoscope, laryngoscope, otoscope, and other specialised clinical instruments; in the clinical examination of the blood, sputa, urine, etc.; in the use of the x-rays; and in practical gynaecology. In each class the numbers are limited,

so that each member is able to receive the direct personal aid of the teacher, and patients are examined under the most favourable conditions. A special vacation course of these practical classes is to commence on Monday, September 9th, and is completed by September 27.

The success already achieved by the Polyclinic is a considerable one, and it appears to have a future of still greater usefulness before it. In providing practical and clinical opportunities for practitioners, and especially for those whose time for study is limited, it serves a highly useful purpose, and, indeed, it is now a matter for wonder that such an institution was not founded at a much earlier date. Doubtless time will lead to change and to development, and to new demands the Polyclinic will probably be able readily to respond. At present it certainly discharges a function of great value, not only to the profession, but also to the public, and we regard it as worthy of cordial and energetic support.

THE LONDON SCHOOL OF CLINICAL MEDICINE AT THE SEAMEN'S HOSPITAL ("DREADNOUGHT"), GREENWICH.

Of the various post-graduate schools that have been established in London, the last to come upon the field is the London School of Clinical Medicine at the *Dreadnought* Hospital, Greenwich. Though many facilities have been provided for post-graduate study in London within recent years, this country is still, as compared with some other centres in Europe and America, behindhand in the opportunities it offers to medical men to return to their own or other hospitals from time to time to burnish the armour of their technical knowledge and to make themselves familiar with the latest advances in medical science. So far as London is concerned, it is possible to attend classes and clinics under the auspices of various colleges and associations, many of which are carrying on most excellent work. The field, however, is much larger than all the established post-graduate institutions can undertake, and so it came about that when Mr. Johnson Smith retired from the service of the Seamen's Hospital Society at the beginning of last year, the Board of Governors of that national and excellent charity resolved to take advantage of the occasion to establish there a school of medicine for the convenience of qualified men. The Board were prompted to embark upon this scheme by the fact that the basis for a clinical school was already laid at the *Dreadnought*, where Mr. Johnson Smith had, over a long series of years, successfully conducted classes in operative surgery, and by the assurance of the medical staff that the clinical material available within the walls of the hospital was not only abundant, but, in many respects, unique. Further, it was felt that the success that attended the foundation of the Tropical School at the branch hospital augured well for the future of a Clinical School at the parent Institution: a school that would be a supplemental extension of the teaching facilities already afforded in tropical diseases and that would enable students of tropical medicine to extend the area of their studies in medicine and surgery, and would also throw open to qualified men generally the valuable clinical resources under the Board's control.

This wise and enlightened policy is much to be commended as being in the best interests of the patients for whom the Seamen's Hospitals are provided, and at the same time of immense potential value to medical science and the mitigation of human suffering.

THE TEACHING STAFF.

In order that this new school should be established on a broad and influential basis, the organising committee decided that it was requisite as a first step towards ultimate success, that the staff should be augmented by the addition—first of seniors who should be men of established reputation; and, secondly, of juniors who should undertake the work of an out-patient department, hitherto undeveloped at the *Dreadnought* Hospital. Steps were taken to ascertain how far these requirements could be fulfilled, and it was speedily seen that the scheme found widespread favour with leading members of the profession. A glance at the names of those who have associated themselves with the movement by becoming members of the senior teaching staff will be sufficient to indicate that the movement has met with gratifying recognition among those who represent the highest and most distinguished interests both in medicine and surgery.

The appointments to the junior staff have been no less gratifying, and the names of those already appointed conclusively show that a skilful selection has been made and a powerful body of active and enthusiastic younger men brought together to carry on the work of the junior offices.

In addition to this, there has been appointed a large staff of extra-mural teachers who will carry on the work of special departments in subjects which are outside the scope of the work which the hospitals of the Seamen's Society are established and maintained to perform. These hospitals are founded for the succour of seamen, and, therefore, with few exceptions, male patients only are admitted to their wards. But in order that the

curriculum of the London School of Clinical Medicine may be comprehensive enough to include all branches of practical instruction, arrangements have been made for the affiliation with the Seamen's Hospital of the Royal Waterloo Hospital for Children and Women, the Bethlem Hospital for Mental Diseases, and the York Road Lying-in Hospital. These hospitals are all situated on the south side of the Thames and are linked to one another by tram and rail, so that post-graduates attending the services of the new school are enabled to take out courses of instruction in every department of medicine and surgery. This is an admirable arrangement, which from the point of view of comprehensiveness nearly approaches the great polyclinics of America and the Continent.

THE CLINICAL SCHOOL.

The Clinical School caters for qualified men only, because it recognises that the admixture of graduates with undergraduates for teaching purposes is inexpedient and unprofitable; it is prepared to arrange classes to meet the requirements both as to time and subjects of those who desire to enter upon a course of study under its auspices. The fees are assessed upon a scale that bring its offices within the reach of all who desire to avail themselves of the exceptional educational advantages which it offers. The certificates of the school are recognised by the Admiralty, the War Office, the Colonial Office, the University of London, and other educational bodies.

THE "DREADNOUGHT" HOSPITAL.

The *Dreadnought* Hospital, which is the centre of the organisation, is situated at Greenwich, close to both railway stations, and within 30 to 40 minutes' reach of London by rail or tram. The hospital contains 250 beds, and these are continuously occupied by cases of wide and varying clinical interest. The admissions to the *Dreadnought* Hospital differ from those at most other hospitals in that cases of tuberculosis and venereal disorder are admitted. The tuberculosis cases are segregated on one of the upper floors, where between 30 and 40 beds are reserved for their use. The floor is in direct communication with the roof of the building, which is flat and is utilised for treatment in the open air. It is in contemplation to segregate the venereal cases in a similar way, but at present neither the accommodation in the hospital nor the funds at the disposal of the Board of Management permit of this being fully accomplished.

The beds are about equally divided between medical and surgical cases, and in them may be seen every variety of disease. On one floor in a medical wing we saw, in the course of a recent visit, amidst many cases of interest, patients suffering from Bright's disease, leprosy, locomotor-ataxia, beri-beri, pneumonia, dysentery, aortic disease, aneurysm, neurasthenia, and malignant disease of the stomach. This indicates fairly accurately the class and extent of "material" met with throughout the hospital on both the surgical and medical sides. The wards are mostly small, many of them containing no more than three beds: there are, therefore, unusual opportunities for the individual examination of cases.

"OUT-PATIENT" WORK.

The out-patient department has been re-organised and equipped with the latest modern requirements. Besides the ordinary medical and surgical consulting rooms, it provides special departments for diseases of the eye, diseases of the skin, and diseases of the ear, throat, and nose. There is a large and admirably-arranged operating theatre for in-patients, and a smaller one in the out-patient department. There are also two laboratories; an extensive and rapidly-growing pathological museum, and convenient post-mortem rooms, where pathology and operative surgery are taught. In the pathological department arrangements have been made whereby investigations of all sorts—chemical, microscopical, biological, etc.—are undertaken at moderate fees. Morbid specimens may be sent by any practitioner, and a careful report may be depended upon. The x-ray room is fitted up with the most modern apparatus and is kept continually busy. For the purposes of the school there are lecture rooms and a library; while the comfort of those who attend the classes has been kept in view by the provision of comfortable reading and smoking rooms. Men engaged in practice in the neighbourhood of the hospital have been invited to join the school as associates at a nominal fee, and a considerable number have already availed themselves of the privilege. By this plan it is possible for those within reach to visit the hospital and attend the clinics when it is convenient for them to do so—a most excellent arrangement for busy men.

LODGINGS.

Within easy access of the hospital, either in Greenwich, Blackheath, Lewisham, or Westcombe Park, there is an abundance of comfortable rooms to be obtained, the addresses of which are inscribed in a register at the hospital, so that those who prefer to live near their work rather than in town, can readily find a choice of suitable accommodation. The scheme of work at the Clinical School is comprehensive and well arranged. Cliniques in medicine, surgery, and special departments are held between two and five o'clock every afternoon; while the work of the out-patient department is carried out during the morning. Special classes are arranged on various subjects in accordance with the demand and at hours to suit the majority of those who go to make them up. From the sketch thus given, it will be seen that those who come to this school have a wide field from which to choose the subjects which they may specially desire to study, besides having the whole practice of the *Dreadnought* and of the affiliated hospitals thrown open to them for bedside investigation and research.

We are glad to know that a large measure of success has already attended the work at this School. It is still in its infancy, but it cannot fail to attract a yearly increasing number of post-graduate students and to become an important factor in the life of the medical teaching schools of London. We are given to understand that any medical man, on presentation of his visiting card, is made welcome at the hospital and is cordially invited to take part in the clinics of the day.

SCHOOLS FOR RECENT GRADUATES.

Opportunities in Special Hospitals.

THE LONDON POST-GRADUATE ASSOCIATION.

The "London Post-Graduate Association" issues tickets which admit to the clinical practice of a number of the leading general and special hospitals in the metropolis. The fee for a term of three months is £10 10s. Applications should be addressed to the Secretary, London Post-Graduate Association, Examination Hall, Victoria Embankment, W.C.

OPHTHALMIC HOSPITALS.

Ophthalmic hospitals are the Royal London Ophthalmic Hospital, City Road, E.C.; the Royal Eye Hospital, St. George's Circus, S.E.; and the Royal Westminster Ophthalmic Hospital, King William Street, W.C. In each of these the fees charged are very modest, and full particulars can be obtained on application to the hospital secretary.

A word must be said of the holiday course in ophthalmology which is held at Oxford, in July. It extends over a fortnight, and the greater part of the day is occupied in practical work. Application should be made to Mr. R. W. Doyne, University Reader in Ophthalmology.

NORTH-EAST LONDON POST-GRADUATE COLLEGE.

This school, which is in connection with the Prince of Wales's General Hospital, Tottenham, N., is recognised by the University of London and the India Office as a place of post-graduate study. Opportunities are here afforded for attending demonstrations of various branches of medicine, surgery, and gynaecology, with opportunities for clinical instruction in diseases of the eye, ear, throat, nose, skin, and in fevers, diseases of children, psychological medicine, anaesthetics, and dentistry. Special classes with a limited attendance have been arranged for these subjects. The fee for a three months' course in any single department is one guinea, or three guineas admits for a similar term to the whole practice of the hospital. A perpetual ticket costs five guineas. Additional information, with syllabus of lectures and special classes, from the Dean, Dr. A. J. Whiting, 142 Harley Street, W.

OTHER HOSPITALS.

University College has arrangements by which Dr. Vaughan Harley holds classes in practical pathological chemistry for the advantage of qualified practitioners and advanced students. Each student not only does the ordinary class analysis, but learns to apply the results to practice. The course includes analysis of saliva, stomach contents, faeces, urine calculi, and pathological fluids. The laboratory is open from 9 A.M. to 5 P.M. The fee for the class, including apparatus and material, is £5 5s. Charing Cross Hospital arranges three special courses of lectures and practical demonstrations during the year, each course consisting of ten meetings and lasting ten weeks. The class meets each Thursday at 4 P.M. in the board-room of the Hospital, and thence proceeds to the department in which the demonstration may be held. Apply to Dr. Bosanquet at the Hospital.

THE LIVERPOOL SCHOOL OF TROPICAL MEDICINE.

This school is carried on in conjunction with the University of Liverpool and the Royal Southern Hospital, for the purposes of research and clinical teaching respectively. A special ward at the hospital has been set apart for the reception and treatment of tropical diseases, and facilities for investigation and study are given in the Johnston Laboratories of the University. The fee for a full course (lasting about two months) is 10 guineas. A hall of residence is attached to the school.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, MARYLEBONE ROAD, N.W.

Qualified Medical Practitioners attending this hospital are permitted to do so for four weeks for a fee of £8 8s. The residence is at No. 2 Cosway Street, N.W. Terms for board and residence £1 15s. weekly.

THE HOSPITAL FOR DISEASES OF THE SKIN, BLACKFRIARS,

Gives practical courses of cutaneous histopathology and diagnosis and treatment of diseases of the skin and syphilis at frequent intervals. They are conducted by T. J. P. Hartigan, F.R.C.S. (Eng.). Apply, G. A. Richardson, Secretary.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, QUEEN SQUARE, W.C.

This hospital is a School of Medicine of the University of London, and has been recognised by the conjoint Board for England as a place where part of the fifth year may be devoted to clinical work. The out-patient practice is open without fee from 2.30 every day (except Thursday and Saturday), when patients are seen by the physicians for out-patients and the assist physicians. The in-patient practice is only open to those who take out the hospital course. Three courses of lectures and clinical demonstrations will be given in each year. The out-patient hospital practice and lectures are free, but for the hospital course a fee of two guineas for three months or three guineas for six months is charged. The museum is available for the prosecution of special work under the pathologist, for which a separate fee of two guineas for three months is charged. Apply C. E. Beevor, Dean of the Medical School.

THE HOSPITAL FOR WOMEN, SOHO.

The hospital contains 60 beds. In the out-patient department there were over 4,000 new cases during the past year, the total number of out-patient attendances being 16,338. This large number affords opportunities for examining and studying most of the varieties of diseases peculiar to women. Clinical assistants receive notice of all operations performed within the hospital, and every facility is afforded them in the out-patient department of obtaining experience in diagnosis and treatment and the practical use of instruments. Fee for one month, three guineas, for each subsequent month, two guineas and a half. A certificate is given at the end of a three-months' course. Any further information

can be obtained by writing to the Dean at the hospital.

CENTRAL LONDON THROAT AND EAR HOSPITAL,
GRAY'S INN ROAD, W.C.

Last year 354 in-patients were treated and 10,050 out-patients were seen, involving over 50,000 separate attendances. Operation days: In-patients and out-patients, Tuesday and Friday, at 2.30 P.M. Special courses of practical demonstrations are given weekly on Wednesdays during the winter and summer sessions by the members of the staff. They are so arranged that practitioners joining at any time are enabled to complete the group of subjects in a course of six weeks. The fee for this course is one guinea, or, with daily attendance at the out-patient department, two guineas. The fee for general clinical attendance is three guineas for three months and five guineas for six months. All information relating to teaching arrangements can be obtained on application to the Dean, Dr. Wyatt Wingrave. Apply to Richard Kershaw, Secretary.

HOSPITAL FOR DISEASES OF THE THROAT,
GOLDEN SQUARE, LONDON, W.

Clinical instruction in the diagnosis and treatment of disease is given daily in the out-patient department from 2.30 to 5 P.M., on Tuesdays and Fridays from 6.30 to 9 P.M., and on Mondays at 9.30 A.M. Practitioners and medical students are admitted to the practice of the hospital at a fee of five guineas for three months, seven guineas for six months, or ten guineas for perpetual studentship. Apply to Charles A. Parker, Dean.

IN SCOTLAND.

POST-GRADUATE TEACHING IN EDINBURGH.

The four Scottish Universities, at three of which are situated medical schools of no mean reputation, have been but little distinguished in the past for their encouragement of post-graduate study.

St. Andrew's and Aberdeen concern themselves with the graduate no further than by offering him a degree in Public Health. Beyond this, Glasgow, offers courses in practical bacteriology, pathological histology, physiological chemistry, embryology, and a few of the special departments. Special courses are provided at Anderson's College Medical School and at St. Mungo's College. At the Glasgow Royal Infirmary the members of the staff of the hospital, with the hearty co-operation of the managers, have now arranged a sixth series of post-graduate classes. These are to be opened on September 3 by Sir Almroth E. Wright, M.D., F.R.S. The subject of his address is the "Principles of Vaccine-Therapy," one to which he has devoted much attention and original research. This year the staff of the Royal Infirmary have organised a most comprehensive series of practical and clinical classes. The previous courses have already proved very successful, and have been well attended. This present course will include in all about one hundred and twenty meetings. Apply to Dr. Maxtone Thom, Superintendent of the Royal Infirmary.

THE EDINBURGH SCHEME.

In Edinburgh, however, a more elaborate scheme is available for the graduate desirous of con-

tinuing his studies. The University of this city, in addition to teaching the subject of public health, has for some years provided advanced classes in the ordinary medical subjects for senior students and graduates, such as bacteriology, organic chemistry, and embryology, while numerous laboratories attached to the various professorial chairs have been open for research under certain restrictions. These laboratories are increasing yearly in equipment and efficiency, mainly as a result of the funds derived from Mr. Andrew Carnegie's gift of £2,000,000 to the Scottish Universities. For this purpose, too, a magnificent laboratory has been organised and equipped by the Royal College of Physicians of Edinburgh, where any medical graduate may obtain permission to conduct scientific research.

The University and the Royal Colleges of Edinburgh provide courses for graduates who have recently obtained their diploma—medical officers home on furlough, practitioners resident in country districts, foreign doctors anxious to study English, and any others who may desire a brief *resumé* of the essentials and recent advances in various special subjects. The holiday course lasts from September 17 to October 6, and embraces lectures and demonstrations on some twenty or thirty subjects. The course has been arranged so that each member may attend a large number of subjects, for each of which a teacher has been chosen who is regarded as to some extent an expert in his subject. Most of the subjects are covered in three or six demonstrations of an hour or two hours each, and the fee charged is a composition one of six guineas for the whole course, or three guineas for any three subjects selected. Those attending the course may, if they so desire, obtain rooms in one of the University Halls at a charge of £1 10s. per week for board and lodging.

IN IRELAND.

TRINITY COLLEGE, DUBLIN.

A three weeks' post-graduates' course is given during the summer session at Trinity College, Dublin. The fee is £5 5s. A limited number of the class can live in the college rooms and dine in hall, at a charge of £1 per week. Apply Dr. Alfred Parsons, Lower Fitzwilliam Street, Dublin. A school has been formed to prepare candidates for the Royal Navy, the Royal Army Medical Corps, and the Indian Medical Services. The classes are held twice a year. Apply Dr. C. A. K. Ball, Merrion Square, Dublin. An excellent post-graduate course is that of the Catholic University School of Medicine, given at the Mater Misericordiae and St. Vincent's Hospitals, Dublin. The summer course commences on June 10, and the autumn course on September 15. The fee for the entire course is five guineas. Full particulars may be obtained from the Registrar, Medical School, Cecilia Street, Dublin.

BELFAST.

Special summer classes are formed in bacteriology, clinical pathology, neurology, chemical physiology; and during the winter facilities are afforded to graduates to work at these subjects.

NOTES ON MEDICAL SCHOOLS AND COLLEGES.

LONDON.

St. Bartholomew's Hospital Medical School.—St. Bartholomew's is the oldest second largest hospital in London; the site has been recently enlarged by the purchase of $1\frac{1}{2}$ acre of adjoining ground, and the first block of new buildings erected at the cost of £130,000 was recently opened by His Royal Highness the Prince of Wales, K.G. These buildings comprise casualty and out-patient departments, eight special departments, new quarters for the resident staff, a dining hall and common room for students, etc.

A new pathological institute is now in course of erection, and will be opened in the course of a year.

The erection of this block does not interfere in any way with the work of the hospital or the school.

Central London Ophthalmic Hospital, Gray's Inn Road, W.C.—This hospital has twenty-six beds, and possesses facilities for daily clinical teaching. Last year there were 355 in-patients and 12,910 out-patients (entailing 31,230 attendances). Classes of instruction on the following subjects will be held during the winter session, commencing in October. The course is open to both men and women students, and those wishing to attend are requested to send in their names to the Dean. The use of the ophthalmoscope, fee £2 2s. Errors of refraction, fee £1 1s., Mr. Ernest Clarke. Medical ophthalmology, fee £1 1s., Dr. C. O. Hawthorne. Operative surgery and surgical anatomy, fee £2 2s., Mr. Hancock. Pathology of the eye, fee £2 2s., Mr. Mayou. X-ray instruction, fee £1 1s., Mr. Mayou. Clinical lectures on external diseases of the eye. The post of clinical assistant at the hospital is open to both men and women, who must be qualified and registered practitioners. A composition fee of £5 5s. will entitle students to a perpetual ticket, and £3 3s. to three months' hospital practice. For syllabus and further particulars apply to the Dean.

Charing Cross Hospital.—This hospital contains 287 beds, and has attached to it a medical school. Classes for University, Conjoint, and Fellowship courses are held, and there are special classes for the practical work required for the D.P.H. course. Total fees, including students' club: For general students: (1) Composition fee 115 guineas; (2) sessional payments: Entrance fee 10 guineas and 15 guineas at the commencement of each winter and 10 guineas at the beginning of each summer session so long as the student remains in the school. The usual resident and students' appointments are open to students, and several valuable prizes and scholarships are awarded annually by the school.

Guy's Hospital.—This hospital contains 602 beds, and has a large medical school. There are special departments, and the number of students' appointments available is probably larger than in other metropolitan hospitals. Special classes are held for London University, Cambridge and Fellowship courses. Students have the advantage of a large and well-equipped residential club. For fur-

ther particulars application should be made to the Dean of the Medical School, Dr. H. L. Eason.

London (Royal Free Hospital) School of Medicine for Women.—The Royal Free Hospital is in Gray's Inn Road, and the London School of Medicine for Women is in Hunter Street, Brunswick Square, W.C.

There are 165 beds in the hospital, all of which are available for clinical teaching.

There are numerous scholarships and prizes offered annually in connection with the school, among which may be mentioned the School Scholarship of £30 and the St. Dunstan's Medical Exhibition of £60 a year for three years, extendible to five years.

The London Hospital Medical College.—The London Hospital is the largest institution of its kind in England, and being situated in the East End, it ministers to a very large and poor district.

Seven entrance scholarships are offered annually, including the Price Scholarship in science, £120; the Epsom Scholarship, £126; and entrance scholarships in science, anatomy and physiology, and arts.

The composition fee is 120 guineas if paid in one sum, or 130 guineas if paid in three annual instalments. A reduction of 15 guineas is allowed in the case of sons of medical men.

Full information may be obtained from the Warden of the Medical School.

The Middlesex Hospital Medical School.—The hospital, which is in Mortimer Street, W., contains 340 beds, including special wards for children and the diseases of women. There is a cancer wing which has 40 beds, and special research laboratories, and the hospital therefore offers unequalled opportunities for the study of this disease, both clinically and pathologically.

A complete electrical and x-ray department has been provided in a temporary building which has been erected in the courtyard of the hospital.

King's College Hospital.—King's College Hospital, which contains 220 beds, is situated in Portugal Street, Lincoln's Inn, and is about five minutes' walk from King's College.

The new hospital, which is now being built in the neighbourhood of Denmark Hill, will be on a much larger scale than the present institution, and will possess every modern requirement for both patients and students. The teaching of the preliminary subjects, including chemistry, physics, biology, anatomy, and physiology, continue to be given at King's College in the Strand, and students entering now may by the time they are sufficiently advanced to study in the wards be able to do so in the new hospital.

The composition fee is—for advanced medical studies—70 guineas, for University course, 140 guineas; for whole Conjoint course, 135 guineas. Full particulars and prospectuses can be obtained by applying to Peyton Beale, Esq., F.R.C.S., Dean of the Hospital, or to Professor Peter Thompson, King's College, Strand.

St. George's Hospital.—The winter session commences on October 1, but students can enter at any time. Special courses are given, in which the requirements of university and other examinations receive careful attention. The hospital contains 350 beds, and the usual resident and students' appointments are open to students. Further particulars may be obtained on application to the Dean of the Medical School, Dr. E. I. Spriggs.

St. Mary's Hospital Medical School.—St. Mary's Hospital at present contains 281 beds, which number will be raised to 341 on the opening of the Clarence Wing. This extension will also provide new operating theatres, a medical clinical theatre, an obstetric department for cases of difficult labour, and a complete electrical department. A new x-ray department has recently been opened in the out-patients' department.

The composition fee is £140 if paid in one sum on entering the Medical School, and £145 if paid in four instalments. On payment of the full composition fee, and provided that he obtains a registrable medical qualification within seven years from the date of registration, the student becomes a perpetual pupil, and is entitled to unlimited attendance on the practice of the hospital. The composition fee for students who have passed their examination in anatomy and physiology is 60 guineas if paid at entrance, 65 guineas if paid in two annual instalments.

University College Hospital Medical School comprises the departments of medicine and clinical medicine, surgery and clinical surgery, midwifery and gynaecology, pathology and morbid anatomy and clinical pathology, bacteriology, mental physiology, and mental diseases, dental surgery, practical pharmacy, and other departments for the study of special diseases, such as those of the eye, skin, ear and throat, and for instruction in the use of anaesthetics, and in electro-therapeutics and the application of the x-rays.

Scholarships and exhibitions to the value of about £450 are offered for competition every year.

Composition fees for the courses required by the University of London: For the Final M.B., B.S. course, 80 guineas, or in two instalments of 50 and 32 guineas; for the medical education required by the Examining Board in England and the Society of Apothecaries; for the course required for the third examination, 80 guineas, or in two instalments of 50 and 32 guineas.

University College (Faculty of Medical Sciences).—The first term begins on October 1 next. Full courses are provided for students desirous of obtaining the medical degrees of the London University, as well as for those seeking the qualifications of other universities and licensing bodies. Facilities for research work are provided. A student can enter the college directly, and at the end of his preliminary courses select the medical school and hospital at which he intends to complete his course, or he can select his hospital and school at the outset, and enter the college for his preliminary course.

Westminster Hospital Medical School.—Westminster Hospital was the first institution of its kind in London which was founded by the voluntary contributions of the public. There is accommodation for upwards of 200 in-patients. There is a Students' Club Union, the subscription for membership of which is included in the general fees. The composition fee is 120 guineas for the course of the Conjoint Board, and 130 guineas for that of the University of London.

PROVINCIAL SCHOOLS.

The University of Birmingham (Faculty of Medicine).—The composition fee for the whole course of lectures and instruction at the University is £85, besides which there is a composition fee for attendance on the medical and surgical practice and the clinical lectures at both hospitals of £42, making a total of £127. Dean: Professor Gilbert Barling, F.R.C.S. The Winter Session 1907-8 commences on Tuesday, October 1.

University College, Cardiff.—Since it was founded, in 1883, University College, Cardiff, has prepared students for the Preliminary Scientific examination of the University of London, and for the corresponding examinations of other licensing bodies. In 1893, Chairs of Anatomy and Physiology and a Lectureship in Materia Medica and Pharmacy were established, making it possible to spend three out of the five years of the medical curriculum at this school.

Arrangements have been made with the managing committee of the Cardiff Infirmary to give students of the college the privilege of attending this hospital, which contains 180 beds.

The composition fee for the three years' course of study for the Preliminary Scientific and Intermediate Examination for the London M.B. is £57 10s.

University of Durham (College of Medicine, Newcastle-upon-Tyne).—A new wing has been added to the College of Medicine to accommodate the departments of physiology and bacteriology. It also contains a students' gymnasium and a set of students' union rooms. The New Royal Victoria Infirmary, containing over 400 beds, was recently opened by H.M. the King. In the new infirmary adequate accommodation will be provided for the study of the various special subjects in addition to the ordinary clinical work.

The composition fee for the complete course of lectures is 72 guineas, and for the medical and surgical practice of the hospital 25 guineas.

The University of Leeds (School of Medicine).—Clinical instruction is given in the General Infirmary, which contains 480 beds, and is amply provided with special departments.

Students of the University also have access for instruction to the Leeds Public Dispensary, the City Fever Hospitals, the Hospital for Women and Children, the Leeds Maternity Home, and the West Riding Asylum at Wakefield.

The School of Medicine, which is particularly well equipped in every way, is separated from the Infirmary by the width of a street only, an arrangement which facilitates attendance at both institutions.

The University of Liverpool (Faculty of Medicine).—Students are prepared for the degrees of the University of Liverpool, or may study for the degrees and qualifications of various other licensing bodies.

The laboratories are modern and very well equipped, and the facilities for instruction are most complete.

Courses of instruction in tropical diseases can be obtained at the Liverpool School of Tropical Medicine. Fellowships, scholarships, and prizes of over £800 are awarded annually.

The Clinical School of the University now consists of four general hospitals—the Royal Infirmary, the David Lewis Northern Hospital, the Royal Southern Hospital, and the Stanley Hospital; and of five special hospitals—the Eye and Ear Infirmary, the Hospital for Women, the Infirmary for Children, St. Paul's Eye and Ear Hospital, and St. George's Hospital for Skin Diseases. These hospitals contain in all a total of 1,127 beds. The organisation of these hospitals to form one teaching institution provides the medical student and the medical practitioner with a field for clinical education and study which is unrivalled in extent in the United Kingdom.

The Victoria University of Manchester (Faculty of Medicine).—The medical department of the University is particularly well provided with facilities for teaching the preliminary subjects—namely, anatomy, physiology, pathology, and materia medica.

Clinical instruction is provided at the Manchester Royal Infirmary, which contains 290 beds, and also has large out-patient and casualty departments. Associated with the Infirmary is a Convalescent Hospital at Cheadle, containing 136 beds. Women students are admitted to the practice of the Infirmary on the same terms as men.

Oxford University.—One of the chief events in the recent history of Oxford University has been the revival of the Medical School. Admirable arrangements now exist for instruction in the preliminary medical sciences; while a certain proportion of the clinical work can be done, if desired, in the wards of the Radcliffe Infirmary, previous to taking out the full course in the metropolis. Clinical lectures are given in medicine and surgery, and demonstrations in pathology, surgical anatomy, and medical and surgical diagnosis are given also. In order to obtain the Oxford medical degree it is necessary to be a graduate in Arts of the University.

The University of Sheffield.—The Winter Session 1907-1908 begins on Wednesday, October 2. The University is within easy reach of the various hospitals with which it is connected for clinical purposes. These are as follows: The Royal Infirmary, contains 255 beds, with an annual average number of over 3,800 in-patients, over 8,000 out-patients, and over 21,000 casualties. The Royal Hospital, with 165 beds, and an annual number of 2,500 in-patients, over 7,000 out-patients, and over 14,000 casualties. The Jessop Hospital for Diseases of Women, with eighty beds, nearly 500 in-patients, and over 2,000 out-patients; also a Maternity Department, with over 250 in-patients per annum, and over 700 out-patient cases attended. Special courses on fevers

are held at the City Fever Hospitals (547 beds), and on Mental Diseases at the South Yorkshire Asylum (1,610 beds).

Fees.—The Composition Fee of £80 is payable in three instalments, namely, £24 at commencement of first year of study; £28 at commencement of second year of study; £28 at commencement of third year of study. The Composition Fee does not include medical and surgical hospital practice, clinical lectures, practical instruction in mental diseases, diseases of women, and infectious diseases. Composition fee for Medical and Surgical Hospital Practice for the full period required by the Examining Boards: If paid in one sum at commencement of Hospital Practice, £36 15s.; or, if paid in two sums of £18 18s., one on beginning Hospital Practice, the other twelve months later, £37 16s.

SCOTLAND.

The Carnegie Trust and the Payment of Class Fees.—This is a fund to provide under certain regulations necessitous but deserving students with all or a portion of the class fees of the curriculum.

Applicants must be over 16 years of age, and of Scottish birth or extraction.

University of Edinburgh.—Clinical instruction is given in the Royal Infirmary, which contains nearly 900 beds; Royal Hospital for Sick Children, with 120 beds; Maternity Hospital; City Fever Hospital; and the Royal Morningside Asylum.

A Diploma in Tropical Medicine and Hygiene has recently been instituted. It is conferred on graduates of the University after an approved course of study and examinations in Tropical diseases, bacteriology, medical entomology and protozoology, and clinical Tropical medicine.

School of Medicine of the Royal Colleges, Edinburgh.—This school of medicine is constituted by an association of lecturers who lecture in several buildings near the Royal Infirmary. The lecturers are recognised or licensed by the Royal Colleges of Surgeons and Physicians, and also by the University.

The teaching is similar to that of the Scottish Universities, and the students receive similar certificates at the close of each session. The lectures qualify for the University of Edinburgh and other Universities; the Royal Colleges of Physicians and Surgeons of Edinburgh, London, and Dublin; the Faculty of Physicians and Surgeons of Glasgow, and the other Medical Boards. The whole education required for graduation at the University of London may be taken in this school. The Anatomy Rooms and Laboratories open on October 1 and the lectures begin on October 15.

The facilities for clinical instruction are similar to those provided for the University, and there are special classes for women. Full particulars and copy of the calendar of the school may be had gratis from the Secretary, R. N. Ramsay, solicitor, 27 Forrest Road, Edinburgh.

Medical College for Women, Edinburgh.—Precisely the same facilities for medical study are given as to male students in the School of Medicine, Edinburgh. Regulations, fees, and arrangements are the same. The lecturers are recognised

by the University of Edinburgh as giving courses admitting to the degrees of M.B., Ch.B. Clinical instruction is given in the Royal Infirmary and other hospitals mentioned above.

The benefit of the Carnegie Trust is open to students of the college.

University of Glasgow.—The whole course of study for the M.B., Ch.B., can be passed in the Medical School of the University.

The regulations are similar to those given above for Edinburgh. Clinical instruction is given at the Western Infirmary, which contains 416 beds, and also at the Lunatic Asylum, the Eye Infirmary, the Maternity Hospital, the City Fever Hospitals, and various other hospitals.

The cost of the course, including matriculation, fees for classes, for hospital attendance, and for professional examinations, amounts to about £150.

Queen Margaret College, Glasgow (the Women's Department of the University).—This is an integral part of the University of Glasgow. The courses, regulations, and fees are the same as for men. The instruction is given by University Professors and Lecturers appointed by the University Court. The College provides a separate building, with classrooms, laboratories, library, and other teaching appliances. The women have all the rights and privileges of University students, and do their clinical work in the Royal Infirmary, where special wards are reserved for their use, and in other hospitals.

Anderson's College Medical School, Glasgow.—The college, at which a full medical curriculum can be obtained, is situated in Dumbarton Road, close to the Western Infirmary and within four minutes' walk of the University.

Degrees and diplomas: Certificates of attendance on the lectures are accepted by the Universities of London and Durham, by the Royal University of Ireland, by the Universities of Glasgow, Edinburgh, etc., under conditions stated in the calendars, and by all the Royal Colleges and licensing boards in the United Kingdom. The Public Health course qualifies for the Scottish Licensing Board, the Irish Colleges, and the University of Cambridge.

The Carnegie Trust extends its benefactions to students of Anderson's College. Particulars may be obtained from W. S. McCormick, Esq., LL.D., The Carnegie Trust Offices, Edinburgh.

A Calendar will be sent on receipt of a postcard by the *Secretary to the Medical Faculty, Anderson's College Medical School, Glasgow, W.*

St. Mungo's College: the Medical School of the Glasgow Royal Infirmary.—The College buildings are situated within the grounds of the Infirmary, and are provided with class-room and laboratory accommodation for several hundred students. Students receive their clinical instruction in the wards of the infirmary, which contains over 600 beds. The College provides a complete medical curriculum, and the classes qualify for the diplomas of the English, Scottish, and Irish Conjoint Boards, and under certain conditions for the various universities. Students who have fulfilled the conditions of the Carnegie Trust are eligible for the benefits of this Trust during the whole course of their studies at St. Mungo's College. The classes at St. Mungo's College are

open to male and female students equally. Students entering for the dental diploma can take out almost all their classes at St. Mungo's College. There is a special department of public health, attendance on which qualifies for the conjoint boards and the Universities of Oxford and Cambridge. The inclusive fees for the whole medical curriculum amount to about £65.

IRELAND.

Royal College of Surgeons in Ireland (the Schools of Surgery).—These schools are attached by charter to the Royal College of Surgeons in Ireland. They are carried on with the college buildings, and are specially subject to the supervision and control of the Council, who are empowered to appoint and remove the professors, and to regulate the methods of teaching pursued. The buildings have been reconstructed, the capacity of the dissecting-room nearly trebled, and special pathological, bacteriological, public health, chemical, and pharmaceutical laboratories fitted with the most approved appliances, in order that students may have the advantage of the most modern methods of instruction. There are special rooms set apart for lady students.

Summer session: Lectures and practical courses commence April 1; terminate June 30.

Winter session: Lectures and practical courses commence October 15; terminate March 31.

The medical students' guide will be forwarded post free on application to the Registrar, Royal College of Surgeons, Dublin.

Queen's College, Belfast.—The courses of study meet the requirements of the Royal University of Ireland and other examining bodies.

Clinical instruction is given at the Royal Victoria Hospital and other hospitals.

Full information can be had on application to the Registrar, Queen's College, Belfast.

Queen's College, Cork.—Students can attend courses which meet the requirements of the Royal University of Ireland, the Conjoint Boards of London, Edinburgh, or Dublin, and other examining bodies.

Clinical instruction is given at the North and South Infirmaries, each of which contains 100 beds, and at other hospitals.

Further information can be had on application to the Registrar, Queen's College, Cork.

The Medical School of the Catholic University, Ireland, Dublin.—Founded in 1855, it is now the largest medical school in Ireland. It prepares students specially for the examinations of the Royal University and the Conjoint Colleges of Ireland and Edinburgh, but its lectures and practical courses are recognised by all the licensing bodies in Great Britain and Ireland. In addition to the ordinary medical examinations it prepares students for the D.P.H. and for the various higher University examinations in pathology, physiology, chemistry, etc. Six exhibitions and numerous gold and silver medals are offered annually for competition. The school opens for dissections on October 1; the winter session begins on November 1.

HANDBOOKS FOR THE SENIOR STUDENT AND THE PRACTITIONER.

MEDICINE.

"Osler's System of Medicine." Edited by Osler and McCrae. (7 vols.). 24s. each volume. Oxford Medical Publications, 20 Warwick Square, E.C. (Only Vols. I. and II. have as yet appeared, and judging from them the system is likely to prove one of the best which it is possible to obtain.)

"Allbutt's System of Medicine." Edited by Professor Clifford Allbutt. 8 vols., 25s. each. Macmillan and Co. (A new edition is in course of publication, of which the first three volumes have already appeared. Allbutt is deservedly ranked as one of the finest works on medicine, and is specially valuable for practitioners because of the great amount of space given to consideration of treatment and pathology.)

"Allchin's Manual of Medicine." 5 vols., 7s. 6d. and 10s. 6d. each. Macmillan and Co. (Shorter but very useful, and particularly good on diseases of special systems.)

"Roberts' Medicine." 26s. 2 vols. H. K. Lewis, Gower Street. (Fully up to date and practical; well written.)

"Gibson's Medicine." 2 vols. 25s. net. Young J. Pentland, Teviot Place, Edinburgh.

"Osler's Medicine." 1 vol. Young J. Pentland. 24s.

"Taylor's Medicine." Churchill, 7 Great Marlborough Street. 15s. net.

"Savill's Medicine." 2 vols., 12s. 6d. each. Churchill.

"Fagge and Pye Smith's Medicine." 2 vols. 42s. net. Churchill.

"Charteris's Medicine." Churchill. 10s. net.

"Bain's Medicine." Longmans, Green and Co. 25s.

"Bury's Clinical Medicine." 1 vol. 16s. Charles Griffin and Co., Exeter Street, London.

"Monro's Medicine." Baillière, Tindall, and Cox. 1 vol. 15s.

"Wheeler's Medicine." 8s.

"Hare's Medicine." 2 vols. 21s. Henry Kimpton.

SURGERY.

"The Manual of Surgery," by Charles Stonham, published by Messrs. Macmillan and Co., in three vols. (A thoroughly practical book containing in a readable form and in moderate compass all that a student need know about surgery while he is acting as a dresser.)

Walsham's "Theory and Practice of Surgery," edited by W. G. Spencer, published by Messrs. Churchill. (Contains a very large amount of information in comparatively few pages, and for this reason it is a little difficult to read in at all a dilettante fashion.)

Rose and Carless' "Manual of Surgery," published by Messrs. Baillière and Tindall. (This text-book runs neck and neck with the preceding in popular favour. Its format is perhaps a little more pleasing than that of its rival.)

Cheyne and Burghard's "Manual of Surgical Treatment," in six parts, Messrs. Longmans, Green, and Co. (Very complete, thoroughly practical, and in every way satisfactory for a senior student.)

Jacobson and Steward's "Operations of Surgery," published by Messrs. Churchill, in two volumes. (Perhaps the most satisfactory English text-book of operative surgery extant. The fifth is now in course of preparation.)

"A System of Practical Surgery," edited by Profs. Von Bergmann, Bruns and Mikulicz, translated into English and edited by Drs. Bull, Frost, Flint, and Martin, issued by Messrs. Williams and Norgate in four vols. (This system gives a very complete account of the science and art of surgery at the present time.)

"A System of Surgery," edited by Sir Frederick Treves, in two volumes, published by Messrs. Cassell and Co. (The work consists of an excellent series of articles by surgeons attached to the various London hospitals, without any attempt to make it encyclopædic. It may be supplemented by Sir Frederick Treves' Manual of Operative Surgery, which is also published by Messrs. Cassell, and in two volumes.)

Surgical anatomy and surgical pathology form the backbone of surgery as a science. But too many students are content to learn only so much as is sufficient to enable them to obtain a minimum examination knowledge. There

are several good English text-books on surgical anatomy. One of the best is certainly M'Lachlan's "Applied Anatomy: Surgical, Medical and Operative," in two volumes, published at Edinburgh, by Messrs. E. and S. Livingstone. It is clear, well written and well illustrated.

Sheild's "Surgical Anatomy," published by Mr. Young J. Pentland, is a smaller work without illustrations, and is meant to be used with the living model. Rawling's "Landmarks and Surface Markings of the Human Body," published by H. K. Lewis, is somewhat on the lines of the late Mr. Holden's "Medical and Surgical Landmarks." Mr. Rawling's book is well illustrated, and has already reached a second edition.

Leaf's "Surgical Anatomy of the Lymphatic Glands," published by Messrs. Archibald Constable and Co., is of greater service to the surgeon than the student.

Sir Frederick Treves' "Surgical Applied Anatomy" has long been a favourite with students. A revised edition has recently been issued by Dr. Arthur Keith, and published by Messrs. Cassell and Co. It is in one volume well illustrated.

Messrs. Sherratt and Hughes, of Manchester, issue a revised edition of "A Handbook of Surgical Anatomy," by Professor G. A. Wright and Dr. C. H. Preston.

Messrs. Box and McAdam Eccles have recently published, through Messrs. Churchill, a book on "Clinical Applied Anatomy," which is in many respects an interesting volume, reminding the reader a little of Hilton's "Rest and Pain," which is so well known to every thoughtful student of surgery. It indicates the important influence of anatomy on the incidence and progress of disease, disorder and injury of the human body.

Surgical pathology can only be learnt in the post-mortem room and the museum. No attempt should be made to learn it by reading. The text-book should be taken into the museum and the description which it contains ought to be verified by the different specimens to be found in every well-arranged collection. Mr. Bowlby's "Surgical Pathology" (Messrs. J. and A. Churchill) contains a large number of drawings, and describes in simple language the various pathological processes which are interesting to the student of surgery.

Walsham's "Surgical Pathology" is a catalogue *raisonnée* of the Museum at St. Bartholomew's Hospital. The third edition, published by Mr. Paterson, has been adapted for use in pathological collections other than that for which it was originally written.

Buchanan's (A. M.) "Manual of Anatomy" (Baillière, Tindall, and Cox) is in two parts, each 12s. 6d., and forms an excellent work for ordinary students or for honours examinations.

Messrs. Ashby and Wright's "Diseases of Children" (Messrs. Longmans, Green and Co.) is convenient because it contains the medical and surgical diseases in a single volume.

Mr. Edmund Owen's "Surgical Diseases of Children" (Messrs. Cassell and Co.) and Mr. D'Arcy Power's "Surgical Diseases of Children and their Treatment by Modern Methods" (Mr. H. K. Lewis), are well illustrated, and give the views of experienced surgeons who have been attached for many years to large children's hospitals.

"Deformities: A Treatise on Orthopædic Surgery," by Mr. A. H. Tubby (Messrs. Macmillan and Co.) is certainly the best and most complete text-book by an English surgeon in this department of surgery. It may be supplemented by "The Surgery of Paralysis," by Messrs. Tubby and Robert Jones.

"Orthopædic Surgery: A Text-book of the Pathology and Treatment of Deformities," by Mr. Jackson Clarke (Messrs. Cassell and Co.) is a successful attempt to give an outline of the various therapeutic measures applicable to deformities, the treatment being based upon the pathology of the condition.

"Diseases of the Nose and Throat," by Dr. De Havilland Hall and Mr. Herbert Tilley, fully maintains the reputation of Mr. H. K. Lewis' practical series. It forms an easy introduction to a special and important branch of

practice which is too often neglected by students because of the slight initial difficulty of learning to use the laryngoscope.

"Diseases of the Throat, Nose and Ear," by Dr. McBride (Young J. Pentland) conveys within a volume of reasonable dimensions the main facts of modern laryngology, rhinology and otology.

Mr. Mark Hovell's "Treatise on Diseases of the Ear and Naso-Pharynx" (Messrs. J. and A. Churchill) gives a very thorough account of aural surgery, and of affections of the nose and pharynx.

Dr. William Lamb's "Guide to the Examination of the Throat, Nose and Ear" (Baillière, Tindall, and Cox, 5s.)

is one of the most valuable books of the kind. It is practical, and suitable to all workers in that speciality.

Dr. Wyatt Wingrave's "Adenoids" (Baillière, Tindall, and Cox, 2s. 6d.) is an exhaustive and essentially practical account of this condition, sound in views and a safe guide, and can be confidently recommended.

Dr. James B. Ball's "Handbook of the Diseases of the Nose and Pharynx" (Baillière, Tindall, and Cox, 7s. 6d.) devotes special attention to the question of treatment.

Roosa and Douglas. "Diseases of Ear, Throat, and Pharynx." Macmillan. 12s. 6d. net.

Dr. Love's "Diseases of the Ear," 25s. (John Wright and Co., Bristol).

MICROSCOPES.

A GOOD microscope is an indispensable instrument for the student and practitioner, and the choice of one is not easy in view of the vast number of different makes which compete for admiration, each of which possesses particular claims for attention and consideration. The following are the chief makers, whose instruments without exception are thoroughly reliable and suitable for both students and practitioners:—

E. Leitz; Wetzlar (London offices, 9 Oxford Street). Stands F and C are recommended, the latter being very suitable for research work. Prices from £8 5s. to £25, according to accessories and number of objectives.

W. F. Stanley and Co., 13 Railway Approach, London Bridge, supply a student's model (£5 5s.), which is excellent for all ordinary purposes. The firm also lists more expensive models, and supplies instruments by other makers.

Swift and Son, 81 Tottenham Court Road, W., sell newly designed instruments for histological and physiological work, fitted with their patent "Ariston" fine adjustment. Their £15 bacteriological microscope is a fine instrument, which is thoroughly to be recommended.

Bausch and Lomb Optical Co. (Agents, A. E. Staley, 19 Thavies Inn, Holborn Circus). The instruments supplied by this firm are exceptionally fine. Stands CD, CA, and DD are suitable for advanced work, while Stands BA, BH, and B are recommended for students' use.

W. Watson and Sons, 313 High Holborn, are makers of high-class microscopes, objectives, and eye-pieces. Their "Fram," "Praxis," "Royal," and "Edinburgh" student models, at prices ranging from £8 upwards, are thoroughly reliable instruments.

Voigtländer and Sohn, 12 Charterhouse Street, E.C. This firm lists a particularly good instrument (Stand III.) with objectives and accessories complete at £9 10s., and the instrument is eminently suitable for students' use. More elaborate stands are manufactured by the firm at prices which, considering the excellence of the instruments, are by no means expensive.

Carl Zeiss, Jena, 29 Margaret Street, Regent Street, W. "Zeiss" is a name deservedly honoured among microscopists. The instruments supplied by this firm are second to none in beauty of finish and reliability, and are well worth the slightly higher prices demanded for them. The firm stocks special complete outfits. Stand I. is one of the finest on the market, and Stands IV. and V. are designed for students or those who desire a less elaborate instrument at a lower price.

Messrs. Ross, Limited, 111 New Bend Street, W., are well-known makers, whose instruments are highly spoken of by those who have used them. Their No. 2A outfit, listed at £10 15s., is recommended for students' use, while outfits Nos. 2C, E, and F, at prices ranging from £18 10s. to £22 12s., are excellent instruments for clerical and research work in bacteriology and hematology.

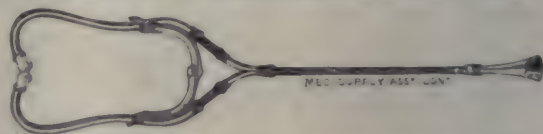
Messrs. R. and J. Beck, Limited, 68 Cornhill, London, are

makers of the fine "Imperial," "London," and "British Student" stands, all of which are thoroughly to be recommended. Special outfits, which include these stands and all necessary accessories, are listed by the firm at prices ranging from £4 15s. to £72 11s.

A NEW BINAURAL STETHOSCOPE.

(Medical Supply Association, 228 Gray's Inn Road.)

We have given this instrument a careful trial. As shown in the illustration, it differs from the ordinary type of



binaural stethoscope in that it possesses a central "stem" of tubing the bifurcation of which is placed much closer to the ear-pieces than in the ordinary instrument. The chest-piece is large, and is made to unscrew so as to admit of intercostal auscultation, and the distal ends of the metal tubes curve inwards instead of outwards. The instrument is from designs of Mr. J. Inman Langley, M.R.C.S., L.R.C.P., who claims that it is neater in appearance, more convenient, and more compact than the binaural stethoscope ordinarily used. There can be no question that the third claim is well founded. The stethoscope folds up very compactly, and can easily be slipped into a side pocket. In clinical use we have found it an excellent instrument. It does not appear to exaggerate normal sounds, while murmurs of low intensity are well transmitted by it. The chest-piece necessitates the use of two fingers to hold it securely on the surface of the thorax, and, as the instrument lacks the V-shaped lower extremity, which is so useful for steadying the instrument with one finger, it should be modified by the addition of a central finger-piece. The instrument is well and strongly made, and is listed at 10s. 6d.

MILLIKIN AND LAWLEY.

To most medical practitioners and students Millikin and Lawley, "dealers in surgical instruments, microscopes, and osteology," are well known. The firm issues monthly catalogues of new and second-hand instruments, appliances, microscopes, and bones, and the student cannot do better than give his careful attention to these. The prices quoted are in every case reasonable: the goods supplied, as we have experienced, are in every case reliable and trustworthy. A feature is the selection of microscopes of which Millikin and Lawley stock a large number, both new and second-hand, including stands by all the leading makers. Students' requisites, such as sets and half-sets of bones, dissecting cases, and dressing instruments, are well represented in the catalogue, which is forwarded free on application to the firm's emporium, 165 Strand, W.C.

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THE MEDICAL INSPECTION OF SCHOOL CHILDREN AND THE APPOINTMENT OF DR. NEWMAN.

It is invidious and futile to engage in comparisons of the respective merits of appointed and disappointed aspirants to office, and we regret that an esteemed and valued contemporary should have been betrayed into so unwonted and ungracious a course when dealing with the appointment of Chief Medical Officer to the Board of Education. We do not propose to enter into the controversy of the comparative claims of Dr. Newman and Dr. Kerr to the office in question, but since the wisdom of the choice of Dr. Newman has been seriously called in question we wish again to express our emphatic approval of his appointment and our appreciation of his eminent claims to the office. It may be, as has been said, that Dr. Newman's experience of pedagogic medicine is less intimate than that of others who could be named, but as we conceive the duties of the Chief Medical Officer to the Board of Education, this is less of a disability than would from a somewhat narrow standpoint, appear.

There is no mystery in pedagogic medicine. It is, after all, only the application of common, everyday medicine to scholars and schools. The medical inspection of school children does not involve an acquaintance with a new science, the monopoly of an uncreated order of medical pedagogues. It is fortunate that no such demands are to be made on the resources of the profession in the administration of the new Act, or whence are these practitioners to be drawn? We need only ask as to the manner in which the need for the medical inspection of school children has been demonstrated, to see at once that what pre-eminently is needed to secure the successful working of the Act is a capable administrator, experienced in the working of public health law and in the ways of local government.

The Board of Education has been happy in securing in Dr. Newman an officer who has established a reputation for sound administrative ability, and one who will bring to bear a ripe executive experience which may be relied upon to secure harmony and unity in public health administration, so wisely expanded by its inclusion of the great branch of school hygiene. The plain fact is that the controversy to which we have referred is not a personal one.

The issue is the creation of a new and independent branch of local health administrators, working beside, but independent of, the existing public health service, or the expansion of the public health service so as to include the scarcely distinguishable branch of hygiene relating to scholars and schools. Dr. Newman's appointment has been interpreted as the signal that the Board of Education will view school hygiene as co-ordinate with, and administratively inseparable from, the other problems of public health. It has been offensively and most unjustifiably urged that this will mean the reduction of school hygiene to a question of "school drains." Both in the lay and a section of the medical press there has been an effrontery of assumption that the medical officer of health was concerned almost exclusively with questions of drainage, and that his interests and knowledge of preventive medicine were limited to sanitary appliances, which can only be excused on the plea that the writers were scandalously ignorant of the nature of the work which they thus travestied.

It is good that this campaign of implicit calumny has been without avail. It would be opposed to public and medical interests were there to be dual officers working independently in the medical service of the local authorities. We have repeatedly insisted on the unity of Medicine, a unity which should be preserved in proportion as it becomes increasingly related in an official capacity to the public.

The growth of the public health service, as a necessary outcome of the increased work from the medical inspection of scholars, will not be less a gain to medicine because it is less inchoate and commands a wider public and medical interest than would a brand-new order of officials medically interested in a little known fragment of pedagogics.

But the chief advantage of expanding the scope of the existing departments of public health is the efficiency with which the work of medical inspection will be carried out. Brought into relation with the other work of the public health departments, school hygiene will assume its due proportion in the public health perspective. Its importance will not be dimmed by the fact that those who would then have to deal with it are already familiar with the rôle

played by undetected disease and physical shortcoming among children attending public elementary schools. But just because the purview is broader and the outlook less circumscribed, will the work take its place without dislocation in the growing hegemony

into which public health administration is consolidating. We hail the appointment of Dr. Newman as a sign that the central authorities are bent on maintaining an unbroken growth in the evolution of public health administration in this country.

SIR JAMES CRICHTON-BROWNE ON ADULTERATION.

SIR JAMES CRICHTON-BROWNE has figured as a champion on many controversial fields, and his presence as a combatant invariably insures both a vigorous and an exciting contest. There is no lack of energy in his strokes, and even those who feel their weight need not withhold admiration for the skill with which they are delivered. To change the figure, we may venture to say that Sir James is a master of the art of thrilling and picturesque denunciation, and his sonorous phrases merit at least the success due to efficient artistic effort. Possibly a suspicion may sometimes arise that the rhetoric is a trifle gaudy and that an ambition to make the flesh creep is not wholly absent. Yet the orator commands, as we are sure he deserves, attention, and even for his most thrilling flights he usually manages to suggest the existence of a substantial justification of fact. Certain it is that his reforming efforts merit every sympathy from the members of the profession, of which he is a distinguished ornament, and who have for their care and responsibility the health of the nation. We therefore turn with interest, guarded perhaps with some degree of circumspection, to Sir James's presidential address to the Association of Sanitary Inspectors.

In the address in question there is presented an extremely gloomy and depressing picture of the condition of our food supplies and of the dangers which these involve both to the individual and to the public health. The methods of corruption, we are told, are becoming more subtle, and substitution, if not a fine art, is rapidly attaining to the level of an exact science. Adulteration and manipulation prevail on a large scale, and their range, so far from diminishing, is extending. Taking individual instances, the practice of reducing the quality of milk by adding water and abstracting cream is becoming more common; the sophistication of butter is increasing, and, by the efforts of "ingenious chemists abroad," this is conducted so as successfully to defy detection; oysters and cockles are polluted with sewage; watercress may have typhoid fever on its leaves; tinned meats carry ptomaines; hams trichinosis; many of our wines are concocted without assistance from the juice of the grape; nuts of a poisonous description have been imported; and even the medicines we give the sick are sometimes deprived of their healing power. To these must be added the risk of tuberculosis both from milk and meat, which, under existing arrangements, are

not subjected to the protective influence of adequate and skilful inspection. All this forms, it must be admitted, a most melancholy and unhappy catalogue. Nevertheless, though we do not in the least propose to question the accuracy of Sir James's statements, they suggest one or two remarks which may help us at least to comparative courage.

Accepting, then, the position as presented, it may be asked whether we must come to the conclusion that things are as bad now as they were, say, fifty years ago. For what Sir James Crichton-Browne says to-day, is very much what the poet sang in the middle of the nineteenth century:—

"And chalk and alum and plaster are sold to the poor for bread,
And the spirit of murder lurks in the very means of life.

While another is cheating the sick of a few last gasps, as he sits

To pebble a poison'd poison behind his crimson lights."

The two pictures have a close family resemblance, and if the inference just suggested must be admitted, things are indeed in a parlous condition. And the seriousness of the position is made manifest when it is remembered that in the interval between the two descriptions social reformers of all varieties have been at work, Acts of Parliament have been put into operation, and numerous expert analysts and inspectors have been on the look-out to detect the careless or wilful adulterator of food. All this has cost, and is still costing, large sums of money, and we fear that practical men of the world, on reading Sir James's address, will come to the conclusion that this money has been largely spent in vain. They will probably also proceed to argue that if the existing machinery has proved a failure it is useless, and indeed worse than useless, to erect more of the same nature. Inspectors increased in number and provided with more elaborate training, will mean yet more expense to the community, and may it not be argued that even with this equipment we have no guarantee that the "skilful foreign chemist" will not be too much for us. In short, with all deference to Sir James Crichton-Browne, we suggest that the unrelieved gloom of his address is calculated to defeat the main object with which it was delivered. By all means let the practices of adulteration and substitution be dragged into the light of day. But let us at the same time hear of what has been successfully accomplished to restrain these practices, and do not force on the public mind the conviction that in spite of our existing sanitary regulations the criminal is winning all along the line. In addition, there comes a time, too, it must be remembered, when the conditions of insurance are so onerous that men will prefer rather to run the risk than to pay the premium.

ANNOTATIONS.

Glasgow Royal Infirmary.

THE Fates in recent years do not seem to have dealt in an altogether kindly spirit with this institution. The re-building scheme, planned now more than ten years ago, was attended by quite a series of controversies, and has only recently been placed on lines calculated to lead to a satisfactory conclusion. Now, it appears that a conflict has arisen between the managers of the infirmary and the governors of St. Mungo's College, which is the picturesque title applied to the medical school of the infirmary. When the College was first incorporated, very large ambitions were entertained in connection with it. The hope was cultivated that it would become affiliated to the University, and that it and the Royal Infirmary would develop into a friendly rival of the University school and Western Infirmary. Events have not proved favourable to these ambitions. The endowment necessary for affiliation has never been raised, and the number of students has, for various reasons, steadily declined. In short, it has become evident that the cultivation of a complete medical curriculum and the development of a successful medical college in association with the Royal Infirmary must be abandoned as impossible. But this by no means implies that the Infirmary has no function as a centre for clinical and pathological study. On the contrary, it possesses facilities in these directions which are probably unsurpassed by any hospital in the country. What is wanted is that these opportunities shall be open to the medical students of the University. When this is attained both institutions will gain an enormous advantage. How such a result may be brought about is the business of the men on the spot. But it is obvious that either local patriotism or a capacity for affairs must be singularly defective if the largest hospital in the city cannot be brought within the sphere of operations of the University medical school. Were this effected, the Western and Royal Infirmaries would offer a conjoined clinical service unequalled at any other centre, and the educational opportunities presented by the University would gain both in efficiency and attractiveness. At the same time, the Royal Infirmary would gain all the benefits which are associated with the systematic presence of well-filled clinical classes.

Advertisement in High Places.

THE question of individual advertisement is one which at not infrequent intervals arouses strong feeling and vigorous denunciation in many professional organisations, and high authorities in the medical press are often invoked to hurl the editorial thunder at the heads of the daring offenders. Whether the stir and agitation thus arising are worth the time and energy spent is a question on which there may be differences of opinion, but, without doubt, condemnation, if it is applied at all, ought to be applied on impartial principles. An advertisement which has recently appeared on the front sheet of the leading lay journal affords an opportunity of judging whether this claim is to receive practical recognition. The advertisement in question refers to a metropolitan

hospital medical school, and, in addition to the usual statements about "special features" and "complete training," it includes a full list of the teaching staff, each professor and lecturer being named in connection with the subject he professes, and having duly set forth his academic and professional distinctions. In this list, Fellowships of the Royal College of Physicians and of the Royal College of Surgeons occupy a prominent position, and there are at least two names which may be found in exalted positions in these august organisations. We are not just now venturing to say that such an advertisement is unethical or improper. Our purpose is rather to record our inability to recognise any distinction between it and others which every now and then come under orthodox professional censure. The publication in a lay paper of the names of the staff of the local hospital or dispensary has been condemned again and again. Recently a similar sentence was directed against a large non-metropolitan medical school. It will be of interest to note whether equal denunciation will extend to the incident related in this note.

The Royal Society of Medicine.

Now that the greater difficulties attending the amalgamation of the London medical societies and the establishment of the Royal Society of Medicine have been surmounted, it may be confidently anticipated that the serious work of the new Society will at once be entered on. Doubtless there will be minor troubles associated with organisation and administration, but these will disappear under the influence of experience and goodwill. Two questions of this order have already come to the surface. One relates to the extent of the privileges of the Fellows of the new society in regard to the various sections and meetings. Of course, the Fellows will enjoy the right to attend all meetings, whether general or sectional. But they will only be competent to take part in the business of those sections of which they are members, and membership means election by the section concerned excepting only those persons who come into one or more sections as belonging to a society which has taken part in the amalgamation, these being without any formality original members of the corresponding sections. At first sight it seems somewhat anomalous that a Fellow of the Society should be excluded from the business of any of the departments of the Society. But a little consideration will show that practice renders this restraint essential. It is imperative that each section should have appropriate representation on the Central Council, and this position might readily be put in peril were any section open to the interposition of a number of Fellows whose interest in the special work of such section was an indirect and remote one. Another anxiety in relation to the new Society is the manner in which Fellows and members of sections shall describe themselves in the Medical Directory. The short way, and we believe the best way, would be for the proprietors to refuse all titles relating to professional societies. Such announcements are of no substantial value, and they help to render burdensome a valuable, indeed an essential, volume.

MEDICAL OPINION AND MOVEMENT.

FOLLOWING the teaching of Cohnheim it has been generally held that the finer branches of the coronary arteries are "end arteries," and do not anastomose, so that blocking of the main stem would deprive a certain area of blood supply. This appears, however, not to be the case. Early this year Janin and Merkel published a series of stereoscopic Röntgen photographs of specially injected hearts, showing the presence of numerous anastomoses between the finer branches of the right and left coronary arteries. More recently Professor Spalteholz has devised a new injecting medium by means of which, together with a process for making the injected hearts transparent, he has succeeded in producing specimens which clearly prove that the coronary arteries are not "end arteries" in Cohnheim's sense. The specimens were exhibited at the last meeting of the German Anatomical Society at Würzburg. They show free anastomoses on the superficial surface, in the substance of the muscle-wall, under the endocardium and in the papillary muscles.

THERE has been quite an epidemic of small-pox in Vienna, and a consequent rush to the public vaccination stations and to medical men for vaccination or re-vaccination. From 25,000 to 30,000 people have been vaccinated every day. The facts in regard to the incidence of the disease and the mortality in relation to vaccination are interesting, and should afford food for reflection by the anti-vaccinators, had they but eyes to see and ears to hear. Seventy-six per cent. of those attacked have either not been vaccinated at all or have not been re-vaccinated within the last 20 years, whilst the remainder are said to come from the district where the disease was prevalent, and had been infected before the protective influence of re-vaccination had time to be developed. The mortality amounts to 10 per cent. of the persons attacked, but of those who have succumbed none had ever been vaccinated. Such facts and figures are, of course, but a repetition of previous records, and should be sufficiently convincing to any individual of average intelligence. In spite of mischievous endeavours of "nature-cure" partisans to shake the public confidence in the beneficial effect of vaccination, it is said that the attitude of the general population has been quite praiseworthy.

At a recent inquest Mr. Troutbeck, Coroner for Westminster, voiced the complaint that has often been uttered before, that many inquests are held in cases in which any such procedure is quite unnecessary. Under the existing law the coroner is bound to hold an inquest under certain clearly defined circumstances—when he "is informed that the dead body of a person is lying in his jurisdiction and there is reasonable cause to suspect that such person has died either a violent or an unnatural death, or has died a sudden death of which the cause is unknown." On the other hand, it is left largely to the discretion of the coroner to decide whether a post-mortem examination shall be made in any particular case. The contention is that the coroner should have power to

order a post-mortem examination in the first place, and then decide according to the results of such an examination whether an inquest is necessary in accordance with the Act. If the post-mortem, for instance, revealed the fact that a sudden death had ensued from a natural cause, such as cardiac disease, there would be no necessity to hold an inquest. Under existing conditions it not infrequently happens that no post-mortem examination is made in cases in which the cause of death is only surmised, but not definitely known, and the inquest does not carry one a step farther towards the truth. One point is clear, however, that if further discretionary powers were given to coroners in the direction indicated, it would become a more urgent necessity that they should possess both legal and medical qualifications. If a coroner is to decide upon the holding of an inquest from the consideration of medical evidence a proper medical training would be an essential qualification.

GASTROJEJUNOSTOMY is an operation which has found such favour among surgeons in recent years in the treatment of intractable gastric ulcers and other allied conditions, that it is of considerable importance to determine how far the operation affects the normal physiological processes of digestion and metabolism of the body. Mr. Hubert J. Paterson, surgeon to the London Temperance Hospital, has made a special study of the subject, and the results of his observations are decidedly reassuring. In the first place, he finds that the regurgitation of bile into the stomach diminishes in amount in the course of a few weeks, and in any case does not interfere with the digestion or general health. On the contrary, he contends that the beneficial effect of the operation on gastric ulcer is, in part at least, due to a neutralisation of the acid contents of the stomach by the alkaline pancreatic juice and bile. A diminution of the total acidity of the gastric contents is the most marked physiological effect of the operation, and he attributes this to the cause just referred to and also to a diminution of the total chlorides. The motility of the stomach, if normal before operation, is practically unaffected. Mr. Paterson, therefore, discards the view that gastrojejunostomy is a drainage operation. He attributes its virtue rather to the diminution in gastric acidity. His observations on general metabolism are highly interesting. These were carried out on nine different patients who had undergone the operation at different intervals of time. Four of these were placed on a mixed diet and five on a milk diet. The amount of nitrogen and fat absorbed from the food were estimated. Taking the figures of average absorption of nitrogen and fat given by Harley and Goodbody for healthy individuals, namely, 93.46 per cent. nitrogen and 95.05 per cent. fat, he finds that in each case the absorption was only slightly below these amounts, the average for the nine cases being, for nitrogen 91.76 per cent. and for fat 93.15. He is, therefore, justified in concluding that gastrojejunostomy has no material effect on the metabolism of the human body.

HOSPITAL CLINICS.

THE TREATMENT OF RHEUMATIC FEVER.

By Sir DYCE DUCKWORTH, M.D., LL.D., F.R.C.P., Consulting Physician to St. Bartholomew's Hospital; Senior Physician to the Seamen's Hospital, Greenwich.

A Clinical Lecture at the London School of Clinical Medicine, Greenwich.

GENTLEMEN,—I propose to discuss to-day the treatment of one of the commonest and most serious diseases with which we meet in this country. Acute rheumatism, or rheumatic fever, abounds mostly in temperate zones, is rare in high altitudes, but is more frequently met with in high, dry and exposed localities.* As you are aware, the term "rheumatism" is greatly abused, and is applied by people in all ranks of life to pains of many kinds.

For us the term has now more than ever a specific meaning, since our present knowledge, which has been remarkably extended within the last ten years, leads us to regard it as a distinct infective malady or toxæmia, due to specific and particulate germinal matter.

This new conception, arrived at by laborious and careful investigations, largely contributed to by Doctors Poynton and Paine in this country, and by several eminent Continental authorities, at once sweeps away all the older theories of the etiology of rheumatism. There still remain difficulties in determining the exact relations of this disease to other varieties of chronic rheumatism, but time will surely clear them up.

In the meantime we have a clear conception of the malady we are considering to-day, and while we regard its toxin as exogenous in character, we maintain the view that the toxic elements of gout, so often confounded with those of rheumatism, are of endogenous character—in other words, that the gouty patient manufactures his own toxins.

We note, in passing, the liability to true rheumatism in early life, its greater prevalence in the female sex, and the incidence on the latter of many of the irregular forms of the disease. We recognise the provoking agency of chill after exertion and exposure to rapid changes of temperature, of the debility induced by hyperlactation, and sometimes we see an epidemic character of incidence.

We make an arbitrary division into acute and subacute forms. In the latter we may find no fever, and may be misled in regarding such cases as unimportant. As a matter of fact, these mild cases may be as dangerous as more obviously severe ones. Hence it often happens that plain indications of past rheumatic disease are met with in patients who tell of no previous history of it. So I venture at once on this caution: Be always concerned about mild attacks of rheumatism in young patients, and do not make light of them.

There is a short incubation period. A sore throat is a common antecedent of pains and arthritis. This may pass away before the joints are involved. It is of more importance than is commonly believed, for there is good reason to think that this angina is significant of the channel of entry into the system of the specific poison. Next, we find flying pains in

the muscles and joints, the larger of the latter being most involved. We do not meet with rigors, or very rarely. There is no symmetry in the arthritis, and the process may partly subside in one joint, and involve others for some days. Sweating is a marked symptom, and a peculiar sour, rank odour of the sweat is noticeable. The expression is anxious, decubitus dorsal, and no movements are made that can be avoided. The tongue is commonly coated, and the bowels are confined. The temperature is often about 102° F. at this stage. The pulse is full and soft. In children the temperature may be almost normal sometimes and the joints little involved; or there may be mere tenderness of the limbs, which is not seldom regarded by parents as "growing pains." There may be scanty urine, loaded with lithates, and sometimes a trace of albumin. The blood shows an increase of leucocytes.

What about the heart at this stage? You know that you have to examine it carefully each day, and if any of its structures are to be involved you may or may not know that this occurrence is to be expected at any time before the eighth day of the disease. If this term is overpassed it is not likely that any form of carditis will occur. Too often, alas, we find early some indication of endocarditis, usually involving the mitral curtains and giving rise to a systolic murmur. Again, we may note the friction murmur of pericarditis, commonly at the left margin of the sternum. This may be preliminary to some effusion into the sac of the pericardium, and if this occurs we are in face of a very grave condition. Any more severe complications, such as hyperpyrexia, cerebral symptoms, or coma, are now of rare occurrence under modern methods of treatment. Yet we must be prepared to meet with them occasionally.

The effects of rheumatic infection are not to be regarded as productive only of arthritis and some variety of carditis. We now recognise rheumatic disease of the fauces, of the skin, and of the brain and its membranes, some of these phases being antecedent to, or associated with, arthritis or carditis, as, for example, angina faucium, varieties of erythema, and chorea. We may meet with abarticular and apyrexial rheumatism, both of serious importance to note, because often overlooked or unrealised; important, too, because an associated endocarditis may be unnoticed and not sought for.

Without doubt the cardiac complications of rheumatism are the most grave. My reflections on the majority of cases of acute rheumatism which I have witnessed in a long hospital career leave a very sad impression on my mind as to the issues of the cardiac damage induced by it. It thus behoves us to do all in our power to avert, or to secure as sound a recovery as possible from, this condition.

* Collective Investigation Statistics Committee.

I have had experience of many varieties of special treatment which have been in vogue since my student days, and have watched the results of the calomel and opium method, the alkaline method, the employment of lemon juice in full amount, the blistering method, the salicin and salicylate treatment.

Each of these was regarded in its day as an advance in meeting pain and averting cardiac damage. Certainly nothing is more striking than the effect of sodium salicylate in affording ease to the patient. Yet it is still found that the infecting toxin is apt to alight upon the endocardium, and to work out its mischief there and in the other textures of the heart. It is still the exception to find a case of well-marked acute rheumatism running its course without involving the heart. Such cases, happily, do occur. Even in these we may find murmurs at the base of the heart which are proved to be inorganic, and due either to enfeeblement of the myocardium or to some degree of anæmia. The toxin of rheumatism is always responsible for a measure of the latter. These murmurs pass away on recovery.

At the present time we know no better method of treatment of acute rheumatism than that by pure sodium salicylate in doses of ten to fifteen grains every four hours for the first two days, and at longer intervals when the pain is subdued. The joints which are involved should be painted with belladonna liniment and wrapped in cotton wool. Nurses must not be too assiduous in washing such patients, only limb by limb should any necessary cleansing be carried out. All unnecessary movement is to be avoided, and the circulation thus kept quiet.

If valvular murmurs or pericardial friction be detected, it is advisable to put a small cantharidine blister over the site, and others may be applied from time to time over the præcordia. This particular treatment has been specially recommended by Dr. Caton, of Liverpool, in recent years, but it has long been a practice in St. Bartholomew's and other hospitals here, and has much to commend it.

Sometimes salicylate treatment is ill-borne by the patient, producing sickness and deafness. You may then substitute potassium iodide and citrate with cinchona, or quinine with advantage. At the outset it is well to give a calomel and colocynth purge, and then leave all aperients alone for a few days.

The diet is important. It should be entirely of milk and farinaceous matter. No beef-tea or animal food, so-called, is to be given. Whey, malt extract, and some alkaline water may be taken. I am familiar with cases retarded in their progress by beef-tea, soups, eggs, and strong food of that kind, which have rapidly yielded to the dietary I have recommended. In cases which are slow to improve under salicylate or other treatment benefit may be secured by small doses of calomel given at night, repeated two or three times, the diet being strictly of milk and farinaceous food.

The point that I now wish to lay stress upon in the treatment of cases where there are cardiac complications is the supreme importance of enjoining absolute rest in bed for a long period after the pains and febrile condition have passed off. The patient then commonly regards himself as cured, and is

ready to get up and complete his convalescence in the ordinary manner. His friends are of the same opinion. I assume that at this stage the diet has been gradually improved, and that after allowing fish and a little meat, there are plain indications of general improvement. Yet the patient must, for his ultimate benefit, and in order to secure as sound a recovery as possible, remain recumbent in bed. I grant you this is not easy to enforce in the face of the relief already gained, the objections of relations, and possibly the claims of duty and occupation. When there are signs of valvular damage, with or without incompetence, consider what they signify. The process is that of a slowly healing endocarditis, proceeding to involution and cicatrization. It is the last morbid result of the disease, undergoing gradual reduction, and in a part which is never at rest day or night. Is it wise to add to this unrest by permitting the patient to behave like an ordinary convalescent? Does not common sense, guided by accurate pathological knowledge, distinctly urge the extremest quietude and repose to allow efficient and complete healing to proceed in the damaged curtains? Yet the rules of some hospitals render it imperative to discharge such a patient after some absurdly prescribed limit of time. Now this necessary and prolonged rest may involve a stay in bed for some weeks. I am of opinion that many patients leave their wards in various hospitals before they are as soundly well as they might be, and this is a cruel proceeding. Some institutions make boast of the vast number of patients they minister to. It were better to treat fewer more efficiently, and for longer periods. What may we look for if we succeed in enforcing this long stay on the part of patients with rheumatic fever? I will tell you. Daily examination of the heart indicates, under this rest-cure, a distinct diminution of the damage done to the affected valve, a fading of the murmur, and a lessening of the temporary hypertrophy of the left ventricle. After two or three weeks we may find the murmur gradually disappearing, and the tone of the heart sounds improving.

During this time it is important to continue the application of small cantharidine blisters over different portions of the præcordia. These are of distinct value, and they also indicate to the patient that he still needs treatment. I do not declare, by any means, that you are to look for a good result in every case, for with your best efforts the damage may remain long in evidence, and may never be recovered from. Yet we meet with cases in after years where the signs of mischief have ultimately passed away, and left the heart in a very satisfactory condition.

In every case, however, I believe it to be our duty to secure this long rest in order to do our best for the patient. I generally give, during this period, quinine and iron, in the form of the syrup of phosphates of quinine, iron and strychnia. The patient must have the bowels and bladder relieved in bed, and must not rise for any purpose. You will meet with strong objection from the patient and his relatives to this seemingly unnecessary and prolonged confinement, but you must overcome this, and explain the importance of obedience to your orders.

POINTS IN DIAGNOSIS.

DIFFERENTIAL LEUCOCYTE COUNTS WHICH MAY ASSIST DIAGNOSIS.

(Continued from page 450.)

MALARIA is diagnosed with absolute certainty only when the hæmatozoa themselves are seen in the blood. When very numerous they can be found in fresh blood without staining; more often it is necessary to make a blood-film by one of the methods described in the article on Eosinophilia on page 9 of our issue of April 6, and to stain it. Jenner's stain may be used, as described in the same article, but a still better stain for malaria parasites is Leishman's. The formula for Leishman's stain is as follows:—

| | |
|---|-----------|
| Crystalline methylene-blue-eosin compound (Leishman's modification) ... | 0.2 grams |
| Methyl alcohol | 100 c.c. |

The stain may be obtained from any large firm of manufacturing chemists; it is used in the following way:—

The microscope slide is laid upon a horizontal surface with the film-side upwards. It is very important to have a cover, such as a Petrie dish, which can be put over the slide during the process to prevent evaporation and consequent deposition of solid particles of stain. A small funnel with a suitable filter paper is required, and some Leishman's stain is poured into the filter, and the freshly filtered fluid allowed to drop on to the film until the latter is completely and evenly covered by it. Then, after standing for one minute, pure distilled water is allowed to drop into the stain over the film, drop by drop, until distilled water has been added equal to the volume of the stain originally placed on the slide. By an oscillating movement the stain and the distilled water are now evenly mixed, and the slide is allowed to stand for fully another five minutes, and it does not matter if it is left standing even a minute or two longer. The diluted stain is then rapidly poured off the slide, and the latter is quickly washed with clean distilled water; the slide should be left lying horizontal with some distilled water upon it for one minute. It should then be held vertically with its lower end in contact with blotting paper; this will remove all the water that will drain off spontaneously, the drying of the film being completed by allowing the slide to stand in a current of air. It should not be warmed or heated. When dry, the film can be covered with Canada balsam and a cover-glass in the usual way; or it can be examined without being covered, cedar-wood oil being put directly on to the stained film.

It is essential that a $\frac{1}{2}$ -th-inch oil-immersion lens should be used in searching the films for the parasites, and a mechanical stage is a very great advantage. The parasites, if they are present, will be easily recognised either as pale-blue bodies containing dark-brown or almost black pigment-granules within the red corpuscles, or as crescentic bodies containing similar pigment granules, the crescents either lying free, or each having attached to its concave side the "ghost" of a red corpuscle. There are

excellent pictures of these parasites in most textbooks of medicine, and they need not be repeated here. It will depend upon the phase of the malaria what size and form the parasites will present; they are at their maximum development just before the initial rigor of an ague fit, and during the fit itself they are at their minimum of development, sporulation having just occurred, so that there may be no parasites within the blood corpuscles at all.

It may be worth while to give, briefly, the life-history of the hæmatozoon. There are two cycles—a sexual and an asexual. The sexual cycle occurs within the mosquito; the asexual in man. The stages of each cycle are as follows:—

1. The infected mosquito bites a man, and through its proboscis introduces fine spores, termed *ex-oto-spores*, into the man's blood. Each such ex-oto-spore is a potential malaria parasite; it becomes amœboid, invades a red blood corpuscle, appearing at first as a pale excentric speck, but presently growing at the expense of the protoplasm of the red blood disc until it becomes—

2. A typical *hæmatozoon*, nearly filling the red corpuscle in which it is, staining blue with Leishman's stain, and containing near its centre a group of dark-brown pigment granules. When fully grown the protoplasm of the hæmatozoon divides into segments arranged radially from the centre, where the pigment granules are; this form of the parasite is termed—

3. The *rosette*; just when the rigor of an ague fit comes on, the rosette bursts asunder, setting free its segments or spores as—

4. *En-hæmo-spores*; except that they are formed in the blood of the patient instead of in the body of the mosquito these are identical with the ex-oto-spores; and, like the ex-oto-spore, each en-hæmo-spore again becomes amœboid, invades a red corpuscle, grows, produces pigment granules, divides into a rosette at the time of the next rigor, and liberates a fresh series of en-hæmo-spores; and so on, and so on, each such asexual cycle corresponding to one ague fit. There are some minor microscopical differences between the tertian and the quartan parasite, but except in the duration of the cycle, the life-history of the two is very similar. The rosette of the quartan parasite contains fewer spores and larger and fewer pigment granules than does the corresponding rosette of the tertian.

When a mosquito bites the infected patient, and takes into its stomach some of the asexual parasites, there ensues in the mosquito—

1. The first stage of the sexual cycle may sometimes be observed in fresh malarial blood that has been allowed to stand for an hour without drying. Some of the hæmatozoa throw out long thin flagellum-like processes; these are motile, and are the *male* elements, corresponding exactly to the spermatozoa of mammals. Other hæmatozoa extrude from

themselves two polar bodies, and become the *female* elements, corresponding to the ovum of mammals.

2. In the mosquito stomach the flagellum-like male element enters the female element from which the polar bodies have been extruded, the result being a fusion of the male and female elements—that is to say, a fertilised ovum.

3. The fertilised ovum becomes elongated and motile, and from its appearance is termed the *vermicule* or little worm; this bores its way through the stomach wall of the mosquito, and comes to lie in the sinuses outside the stomach. It here loses motility, and begins to grow and subdivide, forming a *sporocyst* and containing a mass of small cells, each of which is called a—

4. *Spore-mother-cell*; in due course each spore-mother-cell breaks up into a number of *spores*. These become liberated within the sinuses around the stomach. By the circulating fluids some of the spores are carried into the proboscis of the mosquito, and when the infected mosquito bites a man some of them become transferred to the man as *exo-to-spores*, similar to those with which we started; the asexual cycle is then ready to begin again.

CONCLUSION.

In all cases of suspected malaria the first thing to do in order to confirm the diagnosis, is to examine the blood for the parasites; and since these are at their fullest development just before the rigor, this is the best time to make the blood film. In the tropics many parasites will almost certainly be present, and they will in all probability be readily found. The chief difficulties arise when the patient has returned to this country, having formerly had malaria abroad, and, after a longer or shorter interval, has a rigor, which might be a recurrence of the malaria, or, alternatively, might be something else. In such cases the detection of the parasites in a film may be either difficult or impossible for at least three reasons:—

1. The total number of parasites in the blood may be so few that probably none will be present in a single film of blood, or even in two.

2. The rigors may be very irregular, and the films may thus be taken at a time when the parasites are undeveloped, and therefore difficult to recognise.

3. The patient may have taken quinine, or, owing to the recurrence of the rigors, the doctor may not have felt justified in withholding quinine any longer, although no positive blood examination has yet been made. The parasites at once disappear from the peripheral blood when quinine is given, so that any examination for them must then be negative.

In England, therefore, it is not at all uncommon for attempts to detect the parasites to fail; and it is a very useful thing to know that there are other features of the blood which afford considerable assistance in arriving at a diagnosis. These other features are:—

A relative increase in the numbers of the large hyaline lymphocytes in the differential leucocyte count, in association with leucopenia, or at least no leucocytosis. By leucopenia is meant an actual diminution of the total number of leucocytes per

cubic millimetre of blood. The relative increase in large hyaline lymphocytes may be up to 15 or even to 30 per cent., a typical count being, for example—

| | Malarial blood, 4,000 leucocytes per cubic millimetre. | Normal blood for comparison. |
|--|---|---------------------------------|
| Small lymphocytes ... | 30 | 30 |
| Large hyaline lymphocytes ... | 22 | 8 |
| Polymorphonuclear cells ... | 47 | 60 |
| Coarsely granular eosinophile cells ... | 1 | 2 |

A similar high proportion of large lymphocytes in association with leucopenia is at present known to occur in only one other condition, namely, *Kala-azar*, which itself has only recently been proved to be different from malaria. The points which will help to distinguish the two are, first, the history as to what part of the tropics the patient had been in, as *kala-azar* is mainly acquired in Assam; and secondly, the condition of the spleen, for great and permanent enlargement of this organ is an indication of *kala-azar* rather than of malaria. People are now beginning to think that the so-called “ague-cake spleen” is not due to real malaria, but to this disease of Assam, *kala-azar*.

It not infrequently happens that the doctor is glad of any help to aid in determining, in the earlier stages, whether his patient has typhoid fever or not. The kind of case in which this happens is of everyday occurrence, and it is hardly necessary to give examples. Apart from the Widal test, which we will not discuss here, there are two other features of the blood in typhoid fever which may often assist in the diagnosis. The first of these is, that *with typhoid fever there is no leucocytosis*. It is often stated that there is leucopenia, but this is by no means always so. It is, however, an almost absolute rule that the leucocytes are not increased above the average limits of health, unless there is some complication, such as perforation with formation of pus. This fact has often been of service in excluding the diagnosis of typhoid fever; for example, it not infrequently happens that the early symptoms of typhoid fever include a certain amount of abdominal pain, too ill-defined, perhaps, to indicate definite suppuration; and on many occasions a leucocytosis up to 20,000 or more leucocytes per cubic millimetre, has served to exclude typhoid fever and has led to the discovery of an appendicular abscess, or of a pyosalpinx, or of some other similar abdominal suppuration requiring laparotomy.

In addition to the absence of leucocytosis, moreover, there is help to be got from the differential leucocyte count; in typhoid fever the polymorphonuclear cells are relatively diminished, contrary to what is found in suppuration, and at the same time the small lymphocytes are relatively increased; this increase of the latter is not as a rule extreme, but it may be very helpful.

It has been stated by one skilled pathologist, that, granted a case of continuous fever which might be typhoid fever, he would be certain of the diagnosis if there were no leucocytosis and at the same time a relative increase in the small lymphocytes in the blood. This is perhaps putting the case rather too

strongly; but it indicates how helpful the above examination may be, particularly in excluding typhoid fever when there is a leucocytosis and when the polymorphonuclear cells, and not the small lymphocytes, are relatively increased in the differential leucocyte count.

The leucocytosis of suppuration is well known, but there are a few points in connection with it that are worthy of notice.

In the first place, for suppuration to produce a leucocytosis the pus must be in a confined place. If it is free to escape, it does not as a rule cause leucocytosis. For instance, there may be very extensive suppurative lesions upon the surface of the body, as in impetigo of the skin, without any increase in the number of leucocytes per cubic millimetre of blood; and the same applies to abscesses which have been incised and are draining well, to empyemata that have burst their way into a bronchus, and so on. It is when a collection of pus is under pressure, leading to toxic absorption, that leucocytosis occurs, and this leucocytosis has been particularly studied in connection with appendicitis and appendicular abscesses. The presence or absence of leucocytosis alone, however, is not sufficient to prove the presence or absence of pus under pressure. Many cases of appendicitis in which the leucocytes reach even 25,000 per cubic millimetre of blood, resolve spontaneously; in other cases, especially in chronic cases with a thick wall to the abscess cavity, there may be pus and yet no leucocytosis. It has been found that a rising leucocytosis—that is to say, an increasing number of leucocytes per cubic millimetre of blood on repeated counts—is a strong argument in favour of pus

being present; but it is seldom that the busy practitioner can spare the time for repeated counts. It is therefore of considerable moment that *the polymorphonuclear cells are relatively much increased when there is pus*, whatever the total leucocyte count may be. In lobar pneumonia, it is true, there is a similar increase in the polymorphonuclear cells, together with leucocytosis in most cases; so that the blood will not distinguish between lobar pneumonia and a deep-seated abscess. As a rule, however, pneumonia may be determined by the history, symptoms, and physical signs, so that the only misfortune of the similarity of the blood changes in it and in pus formation is that they will not assist one in determining the presence of a pneumonic empyema. The following would be a typical differential leucocyte count in a case of appendicular or other abscess:—

| | | From a case of abscess in which the pus was under pressure. Total leucocyte count 18,000 per cubic mm. of blood. | Normal blood for comparison. Total leucocyte count 8,000 per cubic mm. of blood. |
|-------------------------------------|-----|--|--|
| | | % | % |
| Small lymphocytes | ... | 14 | 30 |
| Large lymphocytes | ... | 3 | 8 |
| Polymorphonuclear cells | ... | 81 | 60 |
| Coarsely granular eosinophile cells | ... | 2 | 2 |

It is clear, therefore, that when lobar pneumonia can be excluded, and a deep-seated focus of suppuration is suspected, it is very advisable to make, not only a count of the total number of leucocytes per cubic millimetre of blood, but also a differential leucocyte count in order to determine whether or not the polymorphonuclear cells show a considerable increase relatively to the other white corpuscles in the blood.

POINTS IN TREATMENT.

THE TREATMENT FOR TAPE-WORM.

THERE are three kinds of tape-worm common in man, each of which is derived from a different food source, and therefore prevails in one country or another according as the particular food is more or less commonly eaten there. The three worms are: (1) the *Tenia Solium*, mainly derived from the pig; (2) the *Bothriocephalus Latus*, from fish, especially the pike; (3) the *Tenia Mediocanellata*, from beef. The last-named is the commonest tape-worm in England, the *Tenia Solium* standing next and the *Bothriocephalus Latus* extremely rare.

The treatment is similar in the case of all three. It consists essentially of three stages, namely:—

1. Emptying the patient's bowel as far as possible, so as to leave little or no faecal matter which can surround and protect the tape-worm from the drug which is to be given to kill it.

2. Administering the anthelmintic, which is essentially some preparation of male fern, and preferably the liquid extract.

3. Evacuating the dead worm.

It would sound as though the treatment is very easy; nor is it difficult if all due precautions be taken; nevertheless, it is not at all uncommon for a patient with a tape-worm to suffer from repeated recurrences.

There are patients who have undergone the treatment twice or three times a year, in whom the tape-worm is still present after several years. The greater part of the worm is passed after each attempt to cure it, and for a few months no segments are passed with the stools; then they re-appear. The head of the worm escapes death, and, remaining behind, grows in the course of three or four months into a complete tape-worm fifteen or twenty feet long again.

To kill this head it is needful to take special steps before administering the male fern. The patient may feel so well in himself that he may be loth to go to bed; but he must do so for some days. At a hospital the condition should not be dealt with at the out-patient department; the sufferer should be admitted for a few days as an in-patient. Previous to giving the male fern, the doctor orders a starvation diet combined with laxatives for two, three, or four days as the case may be; the bowel being quite empty, the male fern is given. The precise method adopted, very successfully, by Dr. J. Kingston Fowler is as follows:—

(a) The patient is kept in bed.

(b) For two, three, or in some cases four, days, according to the strength of the patient, a very low

diet is given, consisting, for example, of beef-tea, 2 pints; Mason's essence, 1 tin; two rusks; and port wine, 4 oz. The only medicine given during this time is cascara sagrada, gr. ii. three times a day.

(c) On the third, fourth, or fifth day, as the case may be—and in most cases it will be the fourth—a purgative is given early, followed by the anthelmintic, as follows:—

| | |
|-----------------|---|
| At 5 A.M. ... | Hauftús sennæ compositi, ʒi. |
| " 9 A.M. ... | Extracti filicis maris, mxxv. in capsulâ. |
| " 9.15 A.M. ... | " " " mxxv. " |
| " 9.30 A.M. ... | " " " mxxv. " |
| " 9.45 A.M. ... | " " " mxxv. " |
| " 11 A.M. ... | Hauftús sennæ compositi, ʒi. |

The worm will very likely be passed early in the afternoon. Every particle of it should be kept and examined with the greatest care, in order to detect the head. It is only when the minute head of the tape-worm has been found that a cure can be confidently asserted. If it is not found, a second course of senna and male fern should be carried out the same day; and if it should prove necessary, even a third course. Beyond this it is distinctly inadvisable to go, for the three consecutive series of doses in a state of fasting

will be exhausting enough. Fortunately the whole of the worm is usually passed before the end of the day, provided the preliminary treatment of the patient by rest in bed and low diet has been rigidly adhered to; and as soon as the head has been found, full diet may be allowed at once. If the head has not been found it is best to wait three or four months before repeating the treatment. It is always possible that the head may have really been passed, though it escaped detection. If in three or four months' time the segments should unfortunately re-appear in the stools, the whole procedure should be repeated as above.

The administration of filix mass in four successive doses of 15 minims, rather than in a single dose of 1 drachm, has two advantages: first, it is conceivable that a single dose might pass by the worm without killing it, whereas this is less likely with repeated doses; secondly, the preparation has a very nauseous taste, which is not easily covered when a whole drachm is given in a draught, whereas, given in the smaller doses, it is possible to give it in capsules which are tasteless.

ILLUSTRATIVE CASES.

ANOTHER CASE OF SATURNINE ENCEPHALOPATHY.

THE following case illustrates saturnine encephalopathy, in which, instead of the more common coma and epileptiform convulsions, the symptoms bordered more upon those of temporary insanity—mania with delusions. If the patient had not been known to have lived very temperately his trouble might well have been attributed to the effects of drink.

He was a white-lead cooper, aged 38, who had always been a healthy man, almost teetotal; he was accustomed to do a good and regular day's work, and had never suffered from anything but an occasional cold. There was no history of any neurosis or insanity in the family. The patient had never had syphilis. Five months previous to the present trouble he had acute abdominal colic, lasting a few days, but cured by castor oil and opium. There had been no recurrence until a day or two ago, when constipation began to trouble him badly, and it was soon followed by acute abdominal colic. He then remembered that he had noticed that his hands had "become peculiar" during the last two weeks, so that he could not extend them properly.

When seen he was noticed to be a well-developed, dark-complexioned man, in the prime of life; his face was pale, and expressive of pain; every now and then he writhed about in bed, groaning in the paroxysm of colic, with his hands pressed to the front and sides of his abdomen. Although he could use his hands in this way they were affected by the typical wrist-drop. The bowels had not been opened for four days.

The teeth were in very bad condition, covered with tartar, and there was an irregular blue line near the free edge of the gums.

The temperature was 98.4, pulse rate 88, and respiration rate 20 per minute.

Examination of the abdomen was difficult, but

nothing organically wrong could be made out. The heart and lungs were natural. The urine contained neither albumin nor sugar.

The case seemed to be a straightforward example of chronic lead-poisoning; castor oil and tincture of opium were administered in a single dose, and potassium iodide was given three times a day.

During the night it was noticed that the patient's mental state did not seem quite sound; he talked rubbish, and tried continually to get out of bed. He hardly slept at all. The next day he seemed more sensible, but the following night he was much worse again, calling out at the top of his voice, swearing at everyone who came near him, and using the most filthy language without the least provocation. The bowels having been well opened the colic diminished and disappeared, but the mental trouble persisted for seven days and nights. He became violent, striking both himself and his relations, upsetting the wash-stand and other furniture, breaking everything within his reach to pieces. He required the most careful watching to prevent him doing himself grievous bodily harm. He took to banging his head with great force against the bed-posts, and presently he got the idea that four men had come through the window during the night, and had knocked him about in a ruffianly manner. He wove great detail into this story as time went on, constantly repeating it with additions, amongst which was the idea that he had unsuccessfully tried to bribe the villains to leave him alone, with the sum of one and ninepence.

When this state of affairs had continued for nearly a week the mental symptoms got better fairly rapidly, and throughout the period of recovery from the peripheral neuritis and other toxic effects of the lead, there was no sign of saturnine encephalopathy, and the patient has remained quite well since.

POINTS IN SURGERY.

ANTHRAX AND ITS TREATMENT WITH SCLAVO'S SERUM.

ANTHRAX is a disease due to infection with a specific micro-organism, and incurred in the handling of wools, hides, and horsehair imported from certain foreign districts. For this reason it is known as "wool-sorters' disease" in the parts of England in which it is prevalent. It occurs in two main forms: local inoculation of the skin gives rise to a lesion known as "malignant pustule," while absorption of the bacilli or their toxins by the lungs or alimentary tract causes a general infection or "anthracæmia." Until quite recently the latter condition was regarded as inevitably fatal, and the mortality from malignant pustule, in spite of energetic surgical treatment by excision, was as high as 25 per cent.

THE BACTERIOLOGY OF ANTHRAX.

The bacillus anthracis, the cause of this malady, is one of the largest of the known pathogenic micro-organisms, and is thus easily recognisable microscopically. If the blood of a diseased animal is examined, chains of bacilli of varying length can be found. The bacillus is sporogenous, when grown artificially in the presence of oxygen. No spores have so far been demonstrated in bacilli growing in the living tissues. It is to be supposed that spore formation is kept in reserve to continue the existence of the bacillus and preserve its species at those periods when it is existing in an unsuitable medium. The bacilli themselves are destroyed with moderate ease; boiling them for two or three minutes suffices to kill them, but the spores are peculiarly resistant; they have been known to remain alive even after a week's immersion in a 5 per cent. solution of carbolic acid. It is this power of resistance on the part of the spores which explains the fact that infection can be conveyed by hair from an infected animal many weeks, or even months, after its removal from the body.

MALIGNANT PUSTULE.

Malignant pustule may occur on any part of the body; but is naturally most common on the hands and forearms, since they are especially exposed to infection in the process of handling the hides. After these in order of frequency the face is most often attacked, presumably from being scratched by infected nails.

The pustule starts as a small red pimple at the site of inoculation. This spreads more or less rapidly, and becomes covered with one or more vesicles, whose serum contains active anthrax bacilli. The early stages are not associated with pain, a fact which induces patients suffering from this disease to take no notice of it, and to defer seeking medical advice until they are frightened into doing so by the progressive nature of the local lesion. By this time the prognosis is usually very grave, and the chance of checking the disease is sensibly diminished. After a varying period, usually from one to three days, the base of the pustule becomes much infiltrated, and is surrounded by a row of smaller vesicles. There is also very marked cedema of the tissues round

the pustule, which is a characteristic feature of the disease, and may itself endanger the life of the patient: for instance, when the local lesion is situated in the neck. At the same time the central part of the pustule necroses and forms a greyish-black slough. These later stages are associated with much pain and pyrexia, and the general constitutional symptoms of acute inflammatory disturbance. The lymphatic glands which drain the site of inoculation are enlarged at an early date. In some 75 per cent. of cases the disease is limited to the local manifestations, which clear up gradually, but in the other 25 per cent. death ensues from the effects of acute toxæmia.

ITS TREATMENT.

Until quite recently the only form of treatment for malignant pustule consisted of measures which had for their object its removal or destruction by the knife or cautery; on the ground that the infection was a local one, and that if the bacilli could be removed entirely before their toxins were disseminated, the disease could be arrested. It is true that these methods reduced the death-rate somewhat from that of the days of purely conservative treatment by rest, fixation, and elevation of the affected part with the local application of a mercury ointment.

On the other hand, cases occurred in which the disease seemed to progress more rapidly after the removal of the focus and the surrounding tissues, presumably because some natural immunising body had been also removed in the process, or perhaps because bacilli were enabled to enter the blood by way of the cut vessels. In any case it is obvious that excision of the pustule is far from being a satisfactory treatment in all cases, since there are situations where, for anatomical reasons, it is impossible. Malignant pustule of the eyelid is comparatively common, and excision in such a case would lead at the best to frightful deformity.

THE SERUM TREATMENT.

For the successful treatment of anthrax by a serum which shows prophylactic and curative powers against the disease, we are indebted to Professor Sclavo, of the University of Siena. After prolonged experiments, he has found that he can produce an active curative serum from asses which have been immunised against the disease. The serum is injected into the subcutaneous tissues of the abdominal wall as soon as the disease is recognised, and a big initial dose is given (40 cubic centimetres). In many cases this is sufficient to arrest its course, especially if the disease is taken early, and the patients recover without cessation of work for more than a day or two. By this means the death-rate from malignant pustule has been reduced in Italy from 25 to 5 per cent.

A fair number of cases have now been treated with this serum in England; in some of the

cases excision was also performed, but in others this was impossible, for anatomical reasons. Mr. Stretton, of Kidderminster, reported such a case in the *Lancet* (May 27, 1905), and he remarked at the time: "The case was certainly a bad one, and from my experience I should have expected a fatal result. How far this was averted by the use of the serum it is impossible to say, but the results are so

far very encouraging." As far as our knowledge goes at present it seems that no case of malignant pustule need be fatal if a large initial dose of serum is given at an early stage, while some very desperate cases have been saved. Its use reduces the destruction of tissue to a minimum; and it is the only treatment which gives any reasonable prospects of success in cases of generalised infection.

THE TREATMENT OF FRACTURES FROM A COMMON-SENSE POINT OF VIEW.

VI. FRACTURE OF THE CLAVICLE.

FRACTURE of the clavicle is a frequent but fortunately not a very severe injury. It is frequent, because the position of the bone is superficial, which exposes it to fracture by direct injury, and because the whole weight of the falling body is transmitted to it through the outstretched arm, so that fracture by indirect violence is common. It is rarely a severe injury because it is not often associated with the complications which accompany fractures of other long bones. Compound fracture of the clavicle, for instance, is most uncommon, because the skin over it is loose and the fascia covering it is strong; nor are the vessels which pass under it often injured, because they are protected by the subclavius muscle from injury by jagged ends of bone. It has, however, been known to have fatal results, and at least two historical characters, William III. and Sir Robert Peel, succumbed to the results of this injury.

The commonest form, and the only one in which there is any noticeable displacement, is a fracture at the junction of the two curves. If it be remembered that the normal action of the clavicles is to keep the shoulders up and back, that is to say, to prevent them from falling towards the middle line, the displacement which occurs when the clavicle is fractured will be easily understood. The moment the bone is broken the shoulder on that side tends to fall in, so that the outer fragment of the bone is carried downwards and forwards with its inner extremity tilted up. The inner fragment does not move from its normal position, being held in place by the rhomboid ligament, which is an exceedingly strong structure. In rarer cases the bone may be fractured at the sternal or at the acromial end, or between the conoid and trapezoid ligaments. These injuries are generally produced by direct violence, such as a fall on the point of the shoulder, and there is no displacement—an important point, because these conditions are easily overlooked.

TREATMENT.

Many methods of treatment have been suggested for fractures of the clavicle. Union appears to occur equally readily whatever form of treatment is adopted, and the usefulness of the arm is hardly ever impaired. In many cases the only difference between a good and a bad result is that the line of the bone after union is uniform and smooth in the one,

while in the other there is an unsightly projection due to callus. It is especially important to avoid this in ladies who have to wear low-necked evening dress; and there is no doubt that in these patients the best line of treatment is the recumbent one. The patient is kept flat in bed, with a narrow pad under her back and a small pad in the axilla, the arm being bound to the side and the elbow brought forward. This position is maintained until the union is fairly firm, usually about two weeks; but it is a very tedious business, and the patients complain bitterly of it.

SAYRE'S BANDAGE.

In ordinary cases treatment by Sayre's method is usually adopted. In this a pad is placed in the axilla and a long piece of strapping is fixed to the arm, the end being stitched round it with the adhesive side externally. The loose end of the strapping is then brought round behind the body so that the arm is dragged backwards and is fixed to the chest. The elbow is now pulled forwards and fixed with a second piece of strapping which starts at the sound shoulder, is brought obliquely down across the back to the elbow of the injured side, and is brought forward across the chest to the sound shoulder again, thus fixing the forearm to the chest. The method answers quite well. When the elbow is brought forward after the first piece of strapping is fixed, the point of the shoulder is forced upwards and backwards, and the arm is thus kept in the position in which it rests when the clavicle is intact. But it has disadvantages. The strapping works loose when the patient gets about, and has to be reapplied one or more times before union is firm. And, again, it is very hard for the patient to wash himself; so that after a short time his condition becomes unpleasant, especially in the axillary region. As a matter of practical fact, one finds that however a fractured clavicle is treated the results are much the same, as long as the shoulder is kept up and back. A very simple and efficient way of doing this, which has none of the disadvantages of Sayre's method, is to use what are known as clavicle rings. These consist of rings of padded lint of such size that they encircle the arm at the shoulder joint. One is put on each arm, and the two are joined together behind by tapes, which are tightened until the shoulder is in the requisite position. Admirable results can be obtained by the use of this quite simple apparatus.

POINTS IN PATHOLOGY.

III.—THE EXAMINATION OF FÆCES (*continued from p. 535*).

As a routine practice the fæces should be examined much more regularly than is usually done. It is perhaps of less importance in the diseases of temperate climates than in those of the tropics, but still considerable information may often be obtained and obscure points cleared up by attending to this. For an ordinary macroscopic inspection the stools should be placed in large flat glass dishes with tight-fitting lids in order that one may readily see them, but still avoid the unpleasant odour. During the examination of the patient, or after this is concluded, in hospitals where fæces are regularly studied, the nurse brings round the dish and then the physician sees for himself how things are going on, and can thus also readily demonstrate to students or others the points to be noted. The most important of these are the colour, consistence, form, the presence or absence of bile, and of abnormal constituents such as blood, mucus, shreds of tissue or sloughs, parasitic worms, either complete or in parts, and so on. The only way to tell whether a case of dysentery, say, or of *sprue* is progressing favourably under treatment is daily to inspect the stools; in the former the gradual disappearance of the blood, mucus, pus, and sloughs, and the return to a solid condition, indicates that repair is taking place in the damaged bowel while in the latter the reappearance of bile and the disappearance of the diarrhoea are phenomena of equally hopeful import.

INTESTINAL PARASITES.

After the administration of anthelmintics for the different intestinal entozoa careful examinations of the fæces must also be made to determine the presence or absence of the head of a tape-worm, or the number of adult oxyures (thread-worms) or ankylostomata (hook-worms). The best way of doing this is to strain the stool through fairly fine muslin by repeated washings, then to place what remains behind in a flat glass dish, mixing this with water and placing it over a black glass slab or a dark-coloured table. The worms then will readily be detected by their white colour, and may be picked out with a fine pair of forceps, washed again, counted, and preserved if necessary. The demonstration of the head of the tape-worm requires some skill. One usually finds on following up the segments that the thin part of the neck bearing the head has got broken off, and then the question arises, Has this remained behind in the body or is it lying free in the fæces? If in the latter, by following out the above plan it will be found; it is about the size of an ordinary pin-head with a piece of the neck about the thickness of a piece of catgut attached: while if not here it means that it has not become detached from the intestine, and in due course a new worm will grow from it and require subsequent treatment. This sequence of events is common, so it is useful to be able definitely to tell the patient whether or not the head has been passed. Flukes are not common

in the human subject in England; they are shaped like leaves. The *ascaris lumbricoides* or common round worm is seen fairly frequently; on account of its large size it cannot be overlooked. The *trichocephalus dispar*, or whip-worm, is not expelled after anthelmintics; its presence, however, may be detected by finding its eggs in the fæces (see later), or it may be picked out of the cæcum at autopsy.

BACTERIA IN THE STOOLS.

After the completion of the macroscopical examination of the fæces—the importance of which has just been indicated—we may proceed to its microscopical study, and further valuable details may thus be gained. Specimens may be prepared either wet or dry, unstained or stained, just as with blood, urine, and other excretions: for the former all that is required is to take up some of the fæces with a match or a platinum loop, put a drop of it on a slide, cover this with a slip, and ring with vaseline. If too hard or dry it may be softened by mixing with a little water. For the latter films are made on slides as with sputum, fixed by heat or alcohol, and then stained by any of the simple bacterial stains or by Leishman's modification of Romanowsky's stain. Whichever method is adopted, the first noticeable thing is the enormous numbers of bacteria that are present: the technique for the isolation and differentiation of these is difficult, tedious, and of little value unless carried out by a skilled bacteriologist. The bacilli of typhoid, dysentery, cholera, etc., may thus be recovered from the stools.

Leaving the bacteria, then, other abnormal constituents may be detected, but considerable practice is required to tell them from ordinary vegetable cells and fibres normally found in the stools. The most important are parasites of various kinds, protozoa or the ova of various helminths. Of the former we have the amœbæ, one of which, the *amœba coli*, is the causative agent in the tropical variety of dysentery. They are sometimes found in great abundance, at other times they are scanty and require careful looking for. To make certain that they are present it is necessary to heat the slide to blood temperature in order that they may move. For this purpose it should be laid upon a copper stage with a circular hole cut in the middle, a long arm projecting from its anterior aspect, so that this may be placed in a Bunsen burner standing somewhere near the microscope. The heat passes along this to the copper stage, and so to the glass slide, and then the parasites will begin to throw out their pseudopodia and move about among the cells and other debris. The ova of the different worms are easily detected; no heating is required, and most can be seen with the low powers of the microscope. The commoner of these are the *ankylostoma duodenale*, *ascaris lumbricoides*, *trichocephalus dispar*, *oxyuris vermicularis*, *bilharzia hæmatobia*, *tænia solium*, and *tænia saginata*. The ankylostome eggs have a thin shell, and the protoplasm inside is usually

segmented into two or three masses; those of the common round worms have no segmentation of the protoplasm, are usually deep yellow in colour, and have an irregular kind of sheath round the shell, while the trichocephalus ova, the prevailing colour of which is brownish yellow, are shaped like little barrels with a knob at each end. The eggs of the bilharzia are furnished with a spine, which may in some instances be terminal, in others lateral. A careful search for such eggs should always be made in

patients with rectal trouble who have resided in Egypt or other parts of Africa. The eggs of the two tape-worms mentioned above resemble each other closely; from the others they can be differentiated by their shape, which is circular to slightly oval, by the radially striated shell, and by the presence of hooklets in the interior. Occasionally living embryos are seen in the stools; they are usually the larval forms of the Rhabdonema Intestinale, and are known by the name of the Anguillula stercoralis.

DERMATOLOGY.

THE DIAGNOSIS AND TREATMENT OF BARBERS' RASHES.

Not every eruption which appears upon the beard region after a visit to a hairdresser is "barbers' itch," or a "barber's rash." These terms were originally applied to true ringworm of the beard only, but they have since become elastic enough to include several different types of coccigenic, impetiginous, and eczematous affections which happen to be first noticed within a period of time, which may be most variable, after the application of the barber's tools. The question of *post hoc* or *propter hoc* is one that is sometimes very difficult for the practitioner to decide, especially when he remembers that his diagnosis may cause legal proceedings to be taken by the patient against the, perhaps, perfectly innocent barber. Not only is it notoriously difficult to prove wilful negligence in such cases, but the doctor may be asked some extremely awkward questions in the witness-box. The ordinary white coccus inhabiting the normal human epidermis has been known, under altered conditions of soil, to acquire a sudden virulence, and to produce lesions indistinguishable from those caused by pyogenic organisms. It is not wise, therefore, to pronounce hastily with regard to the connection of the skin trouble with a visit to a barber.

RINGWORM OF THE BEARD.

There are several characteristics which serve to distinguish *tinea barbae* from other eruptions of this region. They are (a) small areas of scaliness surrounding the hair follicles; (b) the presence of dull-looking, broken, or thickened hairs, which prove to be brittle on attempting to epilate them; (c) scattered nodules and reddened, infiltrated lumps which may proceed to suppuration. These lumps have considerable diagnostic value, as they are not seen in coccigenic sycosis. If the patient has shaved since finding out the places circinate areas, with slightly raised margins, may be plainly visible. Scrapings from these edges mounted in a drop of potash solution, together with any suspicious hair, should reveal the presence of spores or mycelium when examined under the microscope with a one-sixth objective. The writer well remembers one case in which lumps were present, together with some crust formation, but the patient also had similar areas upon the upper arm. In this case no mycelium was found, there were no thickened hairs, and the whole trouble cleared up rapidly under potassium iodide internally. Tertiary

sycosis had simulated ringworm remarkably well! The hair of the affected parts should be clipped quite close, and an ointment containing 10 grains of nitrate of mercury and $\frac{1}{2}$ dr. of carbolic acid to the ounce of lanoline may be rubbed in night and morning. Epilation of any diseased hairs should also be practised, as far as possible. A lotion of dilute cyllin, or perchloride of mercury (1 in 5,000) is useful for bathing the parts.

SYCOSIS AND FOLLICULITIS.

These two affections are practically identical—i.e. they consist in a primary infection of the hair-follicle with streptococci. There is, perhaps, rather more pus formation in this the coccigenic variety of sycosis (ringworm of the beard being sometimes known as hyphogenic sycosis), and lumpy infiltration is not a marked feature. The hairs may frequently be seen emerging from the centre of an infected follicle, and they offer some resistance to epilation. Crusting is common, and this symptom causes the condition to be mistaken for simple impetigo, which does not necessarily commence in the hair-follicles. The infective process may spread to adjacent parts, and boils may occur upon the neck and face. Antiseptic lotions such as the above-mentioned should be applied warm two or three times a day, and an ointment containing 5 grs. of the red sulphide of mercury and 10 minims of ichthyol in 1 oz. of lanoline or vaseline may be applied afterwards, the hair being kept short as before. In simple impetigo the official ammoniated mercury ointment is one of the most useful salves.

An irritative form of papular eczema is sometimes seen after shaving, whether this be carried out at home or at a barber's. The quality of the soap employed for preparing the lather is popularly held responsible, and very numerous are the patent shaving-soaps advertised which are warranted to give "an easy shave." While admitting that a pure soap should be used for this purpose, it is equally important to secure a thorough sterilisation of the razor and also of the shaving-brush immediately before use. A little cold cream containing some oleopalmitate of zinc is both pleasant and serviceable as a toilet application just after a shave when such an irritation threatens to appear. Dusting-powders containing starch are useful cosmetically, but boracic acid is best avoided by those with sensitive skins.

NOTES ON CURRENT NEUROLOGY.

By PURVES STEWART, M.D., F.R.C.P.

NEUROSES AND PSYCHO-NEUROSES.

THE boundary between organic diseases and so-called "functional" diseases of the nervous system is not so definite as might at first sight be supposed. It is, in fact, a zone rather than a line of demarcation. A neurosis is commonly defined as a nervous affection devoid of anatomical changes. Such a definition, however, is simply a confession of our etiological ignorance, for it is impossible to conceive a disease devoid of a lesion. The lesions underlying the neuroses may not be visible microscopically; they may be of a chemical, biochemical, or molecular nature; as a rule they are less severe than in ordinary so-called organic diseases, but they are none the less real. In functional diseases the changes are not irreparable, unlike diseases due to gross anatomical lesions, which always leave some trace of the old trouble behind.

With advancing knowledge the number of diseases included within the category of neuroses has steadily diminished. Thus, for example, tabes, exophthalmic goitre, and chorea, which were formerly classed as neuroses, have been transferred to the class of organic affections; whilst there is little doubt that epilepsy and paralysis agitans, in view not only of their clinical phenomena, but also of their steadily progressive nature, should, although their specific pathogeny is as yet undiscovered, be separated from the group of neuroses proper. But, as we have seen, in the neuroses it is not the absence of lesions, but the absence of recognised lesions, which constitutes their distinguishing feature. Taking this as our standard, even hypochondriasis, which by many authorities is considered as a psycho-neurosis, must be excluded from the group of neuroses proper. As Raymond has recently emphasised in an interesting series of lectures on this subject,* we have to recognise two varieties of hypochondriasis. In the one, the hypochondriasis is symptomatic of some underlying morbid sensation due to actual structural disease; it is, in fact, merely an exaggeration of a real sensation. In the other variety the hypochondriasis is independent of any discoverable structural change. But in both varieties the essential point is the mental condition of the hypochondriac patient, consisting in a misrepresentation of his sensations; hypochondriasis, in fact, is a symptom of mental affection.

Passing now to the neuroses properly so-called, three conditions are included under this category—namely, neurasthenia, psychasthenia, and hysteria. I will endeavour to summarise Raymond's recent pronouncements on the subject.

The distinction between neurasthenia and psychasthenia is an important one. Neurasthenia proper, like dyspepsia, is a syndrome rather than an actual disease. Its outstanding features consist of "irritable feebleness," together with general depression of all the functions of the nervous system. Its psychological symptoms are simple and elementary. The general

nervous depression manifests itself in such phenomena as instability, rapid fatigue, restlessness, undue emotion and downheartedness. Neurasthenia is a comparatively simple, acquired affection, which with proper treatment is usually curable. It is not a disease *per se*, but a syndrome which can be produced by numerous depressing causes, organic or otherwise. Psychasthenia, on the other hand, is a more serious affair, in which the mental phenomena overshadow the physical; its outstanding features are psychical, chief amongst which are aboulia, or want of initiative power, various persistent obsessions and "phobias," fixed ideas, systematised tics, and so on. Another point of contrast is that neurasthenia is usually a disease of adult life, the result of some accidental cause, physical or psychical, which enfeebles the nervous system. Before the onset of neurasthenic symptoms the patient is free from nervous taint, and after the neurasthenia has passed off he is normal again. Psychasthenia, on the contrary, is the climax of a deep-seated hereditary or congenital predisposition, indications of which are evident in early life, childhood or adolescence, and gradually attain their full development without apparent exciting cause. In short, psychasthenia is a weed which blossoms only in the rank soil of a degenerate nervous constitution. The future psychasthenic, before attaining the full development of his disease, is a neuropathic, listless individual, showing various abnormalities in the form of aboulia, excessive scruples, obsessions, perhaps one of the many forms of tic, and so on. Unlike the neurasthenic patient, who is eminently curable, the psychasthenic individual is never completely cured; he retains certain permanent psychasthenic stigmata, to which we shall return presently.

Hysteria, psychasthenia and neurasthenia occur as fairly distinct clinical entities, but there are many mixed and transitional forms. Thus, especially in incomplete forms of functional disease, it is sometimes difficult, in practice, to classify accurately an individual case.

TREATMENT OF PSYCHO-NEUROSES.

Certain general principles of treatment are applicable to all the psycho-neuroses, and have been well summarised by Raymond. The three outstanding symptoms which call for treatment are general nervous irritability, insomnia, and malnutrition. These three are almost constantly present, the one reacting on the other, constituting a vicious circle, a circle which we must attack simultaneously from all sides.

The first essential is to remove the patient from his home surroundings. This is a *sine qua non* for a successful result. In the early stages of treatment, at least, the isolation should be absolute. All outside sources of excitement and distraction are thus excluded, and the patient can devote his entire attention to his cure. Complete confinement to bed is also

* L'Encephale, 1907.

essential at the outset, but Raymond does not believe it necessary to keep the patient in bed throughout the cure, though he insists on his always going to bed early and rising late.

Hypnotics, when required, must be employed without hesitation and in sufficient doses. Raymond does not specially recommend bromides for this purpose, since they tend to depress the patient and sometimes induce gastric disorder. But if bromide or any other sedative drug be deemed necessary, there should be frequent intermissions in their administration, giving them, say, on alternate nights, so as to avoid cumulative effects. What keeps some patients awake is the mere apprehension of insomnia, and it is often convenient to give the patient a sedative mixture to keep by him, telling him not to take it unless he finds it necessary, say, unless he lies awake for two or three hours after retiring to rest. Often the knowledge that a sleeping-draught is available relieves his apprehension, and he falls asleep without taking it.

The general malnutrition is treated on the lines with which Weir-Mitchell has made us familiar. Special diet is necessary, commencing with milk alone, and rapidly adding other articles until the patient is taking a super-normal amount of food. The patient must be weighed regularly, and as his weight goes up he should be told of it, so as to encourage him and stimulate him to further alimentary feats.

The mental anxiety and depression which is so frequently present in these cases is best treated, according to Raymond, by laudanum, in alternately increasing and decreasing doses. A convenient daily quantity to begin with is 20 minims divided into two doses, one half taken in the forenoon and the other

half some three hours after the evening meal. The daily amount is increased by 2 or 4 minims at a time. Sometimes a maximum of 100 minims is reached, but usually from 60 to 80 minims per diem is enough. Aperients must be employed to counteract the tendency to constipation which results from the opium.

Moral treatment.—“psycho-therapeutics”—in such cases is of the highest importance. Tact and *savoir faire* on the part of the physician are indispensable. He must try at the outset to gain the patient's confidence, and must avoid the common mistake of letting the patient have the impression that he (the patient) is considered as a *malade imaginaire*. The physician must impress on the patient that the disease, whilst real, is a curable one. He must try to restore the patient's self-confidence, and encourage him by pointing out each improvement that occurs as the case progresses. Hypnotism is to be employed only in exceptional cases, and then only for a short period.

Amongst the accessory therapeutic measures must be mentioned hydro-therapeutical and electrical procedures. In conditions of mental depression cold douches or tepid baths of short duration are specially indicated, whereas excited patients do best with prolonged warm baths, tepid douches, and wet-packs. A warm bath for a half to three-quarters of an hour just before bedtime often acts as an excellent hypnotic. Amongst electrical methods, static electricity is the best. Massage and systematic exercises are also of great assistance in combating the malnutrition and favouring assimilation of the abundant diet. Tonics are also of use, and we must not omit to treat with care any co-existing symptoms which may be present along with the nervous malady.

PRACTICAL NOTES ON DIAGNOSIS AND TREATMENT.

Turpentine in Bronchitis.

IN my opinion there is no remedy like turpentine in the later stages of bronchitis. But before giving it make sure of the condition of the urine.—*Dr. Vivian Poore.*

Jaundice in Typhoid Fever.

JAUNDICE is a very rare complication of typhoid fever. It is usually of the toxæmic form, and seldom depends on obstruction, in the ordinary sense of that term. The prognosis is a very serious one.

Diabetic Coma.

SUCCESS in this condition has followed the use of saline transfusion. A solution of 1 drachm of sodium chloride in a pint of boiled, distilled water may be used, and two or more pints of this at 112° F. may be slowly introduced into the median basilic or other large vein.

Ruptured Perinæum.

WITH a tear of the second degree—that is, more than half an inch in extent, it is necessary to put in stitches. The operation is a simple one. All you require is a needle and three pieces of silk-worm gut, preferably stained with methylene blue, because you can so much more easily see to take them out afterwards.—*Dr. H. Spencer.*

Warts.

THE following is a useful application: Salicylic acid, lactic acid, of each 2 parts, collodion 4 parts. Mix. Paint on twice daily.

Endometritis.

KEEP the patient at rest; this is most effectively attained by ordering her to bed. Keep the vagina clean and lessen inflammation in it by antiseptic and sedative or astringent douches; a saturated solution of boric acid if the vagina be sore or the discharge irritating; chloride of zinc ($\frac{1}{4}$ to $\frac{1}{2}$ grain to the ounce) if the discharge is copious. Under such treatment most cases will get well in a week or two.—*Dr. Herman.*

Tachycardia.

A CASE is reported by Hausler in which the pulse rate suddenly rose to 200 per minute. The patient was subject to muscular rheumatism. Various remedies, including digitalis, were tried in vain. Then quinine was given in large doses—30 grains within a period of two hours. In the course of a few hours the pulse had fallen to 80. For two years the patient remained in good health. Then the tachycardia returned, but was again successfully treated by large doses of quinine.

THE GENERAL PRACTITIONER'S COLUMN.

[Contributions to this Column are invited, and if accepted will be paid for.]

A CASE OF HÆMATURIA.

By G. AINSWORTH, M.B., Ch.B.

THE following case is interesting from the doubt as to the correct diagnosis, from its long duration, and from its resistance to treatment.

The patient, T. R., is a boy 13 years of age: from both parents he has a rheumatic family history. Four months ago he was taken ill with an "influenzal cold," which, however, did not prevent him from working. A few days later his throat became sore and swallowing was painful. The tonsils and mouth were inflamed and swollen, the cervical glands enlarged, and he suffered from headache, nausea, and slight pyrexia. These symptoms were succeeded by swelling of the ankles and wrists, aching of the limbs, and erythematous patches on the legs. The joints were affected in succession, and were hot and tender; at the same time the temperature rose to 102°-103°, and continued so for a day or two. Under the influence of rest in bed and moderate doses of salicylate of soda the symptoms subsided, the throat recovered, and the glandular swellings diminished.

THE ONSET OF URINARY SYMPTOMS.

With convalescence the urine became thick and greenish in colour, small in quantity, and of a high specific gravity. In a day or two the colour changed to red; the reaction was acid and bright blood without clots and was uniformly mixed with the urine. Microscopically were seen numerous red corpuscles, including megalocytes, poikilocytes, and nucleated cells; also epithelial and a few granular casts. Micturition was frequent, though but little was voided each time; the act was not attended by pain: palpation of the kidneys revealed no enlargement or tenderness, nor was there any lumbar aching. About the time of the onset of hæmaturia, epistaxis, sickness and giddiness were noted: there was no headache and no pyrexia, and sight remained good. Hæmaturia continued for some weeks, during which time the patient became more anæmic. There was occasional pain and palpitation in the cardiac region, and about one month after the commencement of the illness a systolic bruit was noticed, well marked and localised to the apex, which was in the fifth costal interspace in the nipple line; there was no reduplication of the second sound.

THE TREATMENT.

The patient was kept warm in bed and lived chiefly on milk and barley water; his bowels were very costive, and the hæmaturia, which seemed to be worse when there was constipation, was somewhat relieved after purgation. As regards medicinal treatment, liquid extract of ergot with digitalis was first given; the dose of the former was gradually increased from 5 to 10 minims. In a few days tincture of hamamelis in 10 drop doses was added, but no improvement resulted. Tannic and gallic acids were next tried, but were discontinued, as nausea and constipation became worse. Adrenalin solution in

5 minim doses, afterwards increased to 10 minims, seemed to cause a very temporary improvement, followed by relapse and pain in the loins. Lastly, chloride of calcium was ordered in 30 grain doses every two hours: as improvement followed, this frequency was steadily diminished. In two weeks the urine was practically normal, the heart improved, anæmia subsided, and the patient was allowed up two months after the murmur first appeared.

WHAT WAS THE CASE?

The question of diagnosis is still not quite clear. The initial disorders were almost certainly manifestations of acute rheumatism; there was never any ground for suspicion of scarlet fever or diphtheria, nor was the condition of the throat suggestive of acute streptococcal invasion. If the explanation of the cardiac murmur be the occurrence of rheumatic endocarditis, a renal infarction would easily account for urinary symptoms; but against this there was no sudden pain in the loin, nor was the hæmaturia absolutely abrupt in onset and in resolution. Acute nephritis, on the other hand, is not a common complication of a subsided articular rheumatism, and would almost certainly have been attended with considerable dropsy and headache. Passive congestion of cardiac origin is scarcely consistent with the condition of the heart, which at no time exhibited signs of failure. Again, hæmaturia sufficient to cause marked anæmia suggests the possibility of several emboli having lodged in the renal arteries; if that were so, one would expect to have evidence of a similar event in other organs. Whether recovery was assisted by, or merely coincident with, the administration of calcium chloride is another rather difficult point in an interesting case.

BOOKS RECEIVED.

- G. P. PUTNAM'S SONS.
 "The Shadow of a Great Rock." By W. R. Lighton.
 T. NELSON AND SONS.
 "Clementina" (Nelson Library).
 "If Youth but Knew." By Agnes and Egerton Castle.
 Nelson Library.
 "His Grace." By W. E. Norris. Nelson Library.
 SIDNEY APPLETON.
 "Minor Medicine." By W. E. Wynter, M.D.
 CASSELL AND CO.
 "Insanity." By G. H. Savage, M.D., and E. Goodall, M.D.
 THE LIPPINCOTT CO.
 "International Clinics." Vol. III. 17th Series.
 METHUEN AND CO.
 "The Care of the Body." By F. Cavanagh, M.D.
 THE SANITARY PUBLISHING CO.
 "The Bacteriological Examination of Disinfectants." By W. Partridge, F.I.C., and C. E. P. Fowler, D.P.H.
 THE SCIENTIFIC PRESS, LTD.
 "The Masseuses' Pocket-book." By Araminta Ross.
 "Mental and Sick Nursing." By Robert Jones, M.D.

THE BOOK WORLD OF MEDICINE AND SCIENCE.

A SYSTEM OF MEDICINE. By Eminent Authorities in Great Britain, the United States, and the Continent. Edited by WM. OSLER, M.D., F.R.S., assisted by THOMAS McCRAE, M.D., F.R.C.P. Volume II. (Henry Frowde, Oxford University Press; Hodder and Stoughton, London, 1907.)

IN our issue of August 10 we had the pleasure of noticing the first volume of this new system of medicine and of expressing our appreciation both of its scientific tone and of its adaptation to the needs of the practitioner. The volume now before us is concerned with the infectious diseases, and there is no difficulty in tracing in it an imprint of the same features which were so readily recognised in its predecessor. The various contributors have evidently approached, and carried through, their several tasks in harmony with a plan which may well be the expression of an editorial ideal, and the result is an eminently satisfactory one. It is, indeed, not too much to say that this is one of the most completely ordered and practical volumes on the subject of infectious diseases that can be consulted. Even if the reader for any reason cannot arrange to subscribe for the entire system, he will certainly be well advised to place this second volume on his shelves. The opportunities for systematic study afforded by the practice of isolating and treating cases of these diseases in public hospitals have led to advances both in theory and practice, and these advances in the present work secure ample recognition. At the same time, it is evident that great pains have been taken to obtain clearness and fullness in exposition, so that the various chapters are, almost without exception, as readable as they are valuable.

Chapter I. is entitled "An Introduction to the Study of Infectious Diseases," and is from the pen of Dr. Ludvig Hektoen. It is an admirable statement of the modern doctrines of infection and immunity, and includes a discussion of all the more recent views on these subjects, while at the same time it avoids the severity of an unduly technical analysis. Even those whose work is not obviously associated with the subjects of which Dr. Hektoen writes will read his contribution with pleasure. In Chapters II. to VI. Dr. McCrae deals with typhoid fever, and his contribution is one of the most interesting and important in the whole volume. In particular we would venture to commend the sections dealing with the prevention of the disease and with the diagnosis of perforation of the bowel. Personally, we should like to have had a little more information about the cases now spoken of as "renal typhoid." The true nature of these is very apt to be overlooked, and they carry danger both to the individual patient and to the general community. Dr. McCrae is also responsible for the chapters on typhus fever, to which, significantly enough, are allotted only fourteen pages, as compared with the 160 pages occupied by typhoid fever; he is able to report that there have been no outbreaks of this disease in the United States for over ten years. The same author contributes a short chapter on relapsing fever. Small-pox and vaccination are discussed very fully in chapters written respectively by Dr. Wm. T. Councilman and Professor Geo. Dock. Dr. Councilman also writes on chicken-pox, and each of his articles is illustrated by a number of very successful plates. The article on scarlet fever is from the pen of Dr. Jno. H. McCollom, and is an ably written and well illustrated contribution. Incidentally the author discusses the so-called "fourth disease," and expresses an opinion that the existence of this has not been proved. Both in this section and in that dealing with the treatment of typhoid fever great stress is placed upon the importance of encouraging the patient to drink large

quantities of water. Dr. McCollom does not accept the opinion which has been advanced that infection is not spread by the desquamating epithelium, but solely by discharge from the mucous membranes. At the same time, he is disposed to restrict a capacity for infection to the primary desquamation. "There is very grave doubt," he writes, "if the secondary desquamation is infective." In dealing with the question of the transmission of the disease through the agency of milk, it is somewhat curious, in view of certain sensational statements prevalent in this country, to read: "In London the medical supervision of milk farms is very carefully conducted. In this country it would be well, for the health of the community, if the example of London were followed." Two points may be noted in the remarks relating to the treatment of nephritis as a complication of scarlet fever. The one is that "pilocarpine is of doubtful advantage," and the other the absence of any recommendation of the value of leeches applied to the loins at the outset of the attack; we fancy neither of these positions will meet with universal acceptance. In the chapters on "Measles" and "Rubella" Dr. Jno. Ruhrah maintains the high standard set in the earlier sections; his descriptions of the eruptions are very successful, and he deals with the various aspects of treatment in a thoroughly efficient manner. Here again an opinion is expressed that the existence of the "fourth disease" described by Dr. Clement Dukes has yet to be proved. Diphtheria is adequately dealt with by Dr. McCollom, though we confess we would fain have seen a more detailed attempt to establish a differential diagnosis between tonsillitis and diphtheria on clinical grounds. Dr. McCollom emphasises the value of the bacteriological method when this is rightly performed, and he doubts, in opposition to other statements, whether the specific bacillus is ever found in the throat of healthy persons. In accordance with modern views lobar pneumonia and acute rheumatism (the latter by Dr. Poynton) are here included among the infectious diseases. A very full and valuable account of the former is contributed by Dr. Jno. H. Musser and George W. Norris. On the question of blood-letting in pneumonia Dr. Musser says he "has never resorted to it," though there are conditions in which he thinks it might produce good results. On the other hand, he emphasises the value of dry-cupping. "The cups," he says, "should be applied all over both front and back to the number of twenty or thirty; this should be done early, and repeated every six or eight hours as long as pain persists, the dyspnoea or oppression continues, or the respiration rate rises. After cupping, the pain may further be relieved by *thorough strapping of the chest*." So far as we know, this procedure is not adopted on this side of the Atlantic. Lack of space forbids us even to mention the other valuable articles which this volume contains. They well deserve recognition, and we have no doubt they will receive it from all those who consult them. Altogether, the second volume of Professor Osler's "System" fully realises the expectations formed with regard to it. The work, without question, is going to prove a highly useful and authoritative record covering the whole field of medicine.

HAY FEVER, HAY ASTHMA: ITS CAUSES, DIAGNOSIS, AND TREATMENT. By WILLIAM LLOYD, F.R.C.S. (London: Henry J. Glaisner. 1907. Price 3s. 6d. net.)

THE practical direction of Mr. Lloyd's essay is to emphasise the relations between hay fever and "the presence of hypersensitive areas in the nasal mucous membrane." On this is based a claim for local treatment of the unduly sensitive parts, and the author quotes a number of cases which go to support this claim. The essay is well written, and includes an interesting sketch of the various medical opinions which have been expressed on the nature of hay fever.

HOSPITAL ADMINISTRATION.

CONSTRUCTION AND ECONOMICS.

CURRENT HOSPITAL TOPICS.

The late Mr. R. G. Lund.

IT is with sincere regret and sorrow that we have to record the death of Mr. Reginald G. Lund, who for more than five years has fulfilled the duties of organising secretary to the League of Mercy. Previous to his appointment he held a similar post in connection with Charing Cross Hospital, and was the means of bringing considerable funds to the coffers of that institution. Mr. Lund was untiring in his labours on behalf of the hospitals through the League of Mercy; he had an exceedingly pleasant manner, and was deservedly popular with a multitude of people in all ranks of society with whom he had to deal in connection with an office where personal charm, and the tactful knowledge of individuals, were gifts of momentous importance. Mr. Lund believed in the doctrine of personal service in the cause of the sick in the days of health, and afforded practical proof of this fact by the zeal with which he fulfilled the duties of his office. It is grievous to remember that Mr. Lund, who was in the prime of life, should have been suddenly attacked early in August, that he should have spent the greater part of that month in Charing Cross Hospital, that he should have undergone two operations, and that, on his leaving in a convalescent state early in September, he should have had to return to a hospital bed within a very short time, and should have succumbed to an anæsthetic which was given to enable the surgeons to make a preliminary examination of the causes of the new trouble which had returned him on their hands. The League of Mercy exists to enable thoughtful people to render praise for the blessings of health in a practical manner. The sudden and tragic death of Mr. Lund must bring home to every one of the members the uncertainty of life; and will, we have little doubt, make them even more zealous in the future than they have been in the past in the cause of the suffering and the sick. Our sympathies go out to Mrs. Lund and the children, and we venture to hope that steps may be taken to recognise the good work done by Mr. Lund during his life, and in some measure, if it be possible, to lighten the heavy burden of care which must fall on the widow and the fatherless.

The Sheffield Union Hospital Scandal.

IN our issues of April 27 and May 4 last, on the occasion of the resignation of three medical officers attached to this institution, to which the *Sheffield Independent* rightly called attention, we ventured to say that it was clear that "there must be something fundamentally wrong with the attitude of the hospital authorities towards the resident medical staff." At that time eight resignations of medical officers had taken place, which we pointed out at the time proved that the relations between the resident medical staff and the local Guardians were not such as they should

be. The essentials of the fit administration of a great hospital were not apparently understood by the Guardians of the Sheffield Union, and for this reason we demanded inquiry and reform. We received a letter from a member of the Hospital Committee at the time, in which he deprecated criticism, and urged that everything was being done that could be done to make the position of resident medical officer satisfactory and comfortable.

We gather that the crux of the whole matter has from the first lain in the fact that the Hospital Committee have declined to define the terms of appointment and the duties of the medical staff. There seems to have been a spirit of something like jealousy exhibited by the Hospital Committee in respect to the authority vested in the medical officer by the Local Government Board by their general Order dated March 15, 1906. That Order makes it perfectly clear that the medical officer is to have the control of the whole of the staff, as well as of the patients, together with the arrangements and administration of the wards and all that appertains thereto. The Hospital Committee, however, appear to think that it is not necessary, for instance, to consult the medical officer before some other official takes it on himself to remove a patient from one bed to another, or even from one ward to another, and that, in matters other than treatment, officials other than the medical officer should be left to follow their own will, independent of any medical control. If, as we understand, any such state of affairs as this has been allowed to grow up, despite the Order of the Local Government Board to which we have just referred, then it is certain that steps should speedily be taken to dissolve the existing Hospital Committee and to substitute in its place men with administrative ability and business judgment, who will take care in future not only that the orders of the Local Government Board in respect to their officers are precisely followed, but that the internal administration of the Sheffield Union Hospital shall be placed under the sole authority of the medical superintendent as the supreme head, and that he shall be held responsible for the efficiency of each department and for the comfort, care and cure of all the patients within its walls.

When resignations first became the fashion at this institution it was contended, on behalf of the Hospital Committee, that, although the matter was brought to the notice of the Executive Committee of the Sheffield division of the Yorkshire branch of the British Medical Association, the latter committee determined "that the matter did not travel beyond domesticity, and was one that did not call for their attention." We should be glad to hear whether this contention on behalf of the Hospital Committee is correct or not. If it is, it seems to us a little unfortunate that more care was not taken to go thoroughly into the matter, for, had this course been followed, the existing grave scandal might have been spared,

with the consequent risk to the well-being, and even possibly to the lives, of some upwards of four hundred patients, who are apparently at the moment in danger of being left without any medical care or supervision whatever. Certainly the present state of affairs is not creditable to the administrative abilities of the Guardians of Sheffield, who will find themselves in a position of grave responsibility, if they have four or five hundred sick poor on their hands without being able to obtain medical assistance for them.

The Local Government Board, in consequence of

the resignation of the whole of the medical staff, both resident and visiting, have agreed to send an inspector to investigate the position of affairs which has created such unbearable friction between the medical staff and the Hospital Committee of the Board of Guardians, in regard to the position of the resident medical officers. We hope that the inspector will set to work with a will, and that in the result a Hospital Committee may be selected of adequate capacity to undertake its responsible duties as the executive head of a great Poor-law hospital like that of the Sheffield Union.

STORY OF THE INSANE FROM YEAR TO YEAR.

EIGHTEENTH ANNUAL SERIES.

HOSPITAL FOR THE INSANE, NEW NORFOLK, TASMANIA.

THE Tasmanian Government recently thought it desirable to appoint a Commission to inspect the general hospitals and asylum of the colony, and Messrs. Elkington, Seager, and Hughes were entrusted to carry out this work. As to the qualifications possessed by these gentlemen, we are not in a position to judge; but we may mention that their report is concise and very well arranged. The portion of it which refers to the general hospitals does not fall into the range of this series, but we are glad to have the opportunity of noticing the section relating to the asylum. At the time of inspection the institution contained 466 patients; and we are told that the condition of the wards and the establishment generally reflected great credit on the medical superintendent and his staff; and the Commissioners add that the patients were treated with great kindness. The Commissioners make several suggestions, and with these we are in general agreement. For instance, it is beyond doubt that the official visitors of a hospital should take no part in the executive; and naturally the Commissioners wish to see such an absurd system removed. It is recommended that the medical superintendent should be directly responsible to the Minister alone, and should have control over the whole staff; indeed, we fail to see how discipline could be properly carried out in the absence of that control. An increase in the staff of attendants is advised; and that the nursing staff should be properly trained is another suggestion. The Commissioners remark on the extraordinary amount of mechanical restraint, and not without reason, for 64 patients had been restrained during the previous year for a total number of 163,222 hours, an amount which is probably greater than for all the asylums in Great Britain put together. Better means of observing newly admitted patients is recommended, and the separation of epileptics from the others should be more efficiently carried out. Here it should be remembered that there may be structural difficulties to overcome before perfect classification could be arrived at, and this is probably the case, as we see that more single-bedded rooms are required. That there should be a separate provision for convicts, and that new kitchens should be built are other suggested improvements.

THE ROYAL ASYLUM, EDINBURGH.

At the beginning of the year 1906 there were 829 patients in residence. The first admissions reached the high number of 335, and the readmissions 93. The recoveries were 137, the discharged relieved 106, and the deaths 116. On December 31 the number resident had risen to 880, and the average number resident during the year was 870. The

recoveries for the year stand at 32 per cent. of the admissions, and the deaths at 13.3 per cent. of the average number resident. The first of these percentages is lower than the County Asylum average and the second is higher. Of the year's deaths 55 were caused by cerebral and spinal diseases, general paralysis accounting for 37 of the total. Phthisis was the cause in 18, pneumonia in 6, and colitis in 4. Various moral causes are assigned as causing the insanity in 15 cases. Among the physical causes hereditary influence comes first with 128, and intemperance in drink follows close with 110. Dr. Clouston's report runs to eleven pages, and there is not a dull paragraph in it as regards style, though much of it may contribute dull feelings to him who reads from the sad nature of the statements. Dr. Clouston shows that in the early sixties it was so uncommon to have a female general paralytic that all the medical staff would go to see the patient; that in 1872 there were no such admissions; that in 1874 there were only 3; and that last year there were 38 female patients admitted with this terrible disease. Further, he points out that 37 of these were rate-paid cases; in fact, there were only 6 general paralytics among the private patients. Drs. Ford Robertson and McCrae devoted all their spare time during the year to the investigation of this disease, and Dr. Clouston tells us that they have, in his opinion, "proved its immediate cause to be a microbe which acts specially on brains that have previously been weakened by dissipation, exhaustion, and poisoning." This is by no means a new idea, but it has not often been so authoritatively stated. Regarding "drink" cases, we find the same tale of increase among women. In the Royal Asylum the percentage has risen from 16.2 to 22, and here again it is rate-paid cases that show the highest proportion. What is our modern system of education doing to lessen this evil habit? We fear next to nothing, and Dr. Clouston is right in saying that "the young at school should surely be taught more about it as a mere branch of knowledge that will help them in their future lives." The asylum during the year was visited by an outbreak of asylum dysentery, from which disease 29 patients suffered, with 4 deaths. The outbreak was in this instance traced to a faulty drain. Dr. Clouston thinks it is quite possible that in future legislation "mental disease may become notifiable, as one means of eliminating the unfit for marriage." Perhaps; but it will be a long time. The cost per head for pauper patients was £35 15s. 4d. per annum, the Craig House cases cost £125 13s. 11d., and the intermediate cases cost £43 19s. 9d., but all these charges would be somewhat reduced by deducting prices of articles sold or supplied to the asylum by the farm. The managers express their sense of obligation to Dr. Clouston for his untiring zeal and unvarying courtesy.

NEWS AND COMING EVENTS.

THE Royal Dental Hospital, Leicester Square, has received the sum of £250, less legacy duty, from the executors of the late Mr. John Lawrence Toole.

THE High Court of Germany has decided that it is illegal for the physicians of any locality to band together and establish a definite code of fees for professional services.

THE inaugural public lecture at King's College will be delivered at 4 P.M. on Wednesday, October 2, by Professor Peter Thompson, M.D., who has taken as his subject "The Study of Embryology."

A CONCERT in the series of twenty Odeon Concerts in aid of the Lord Mayor's Cripples' Fund, and under the Lord Mayor's patronage, was given at Hammersmith Town Hall on Friday, September 20. Sir John Kirk, the Secretary of the Ragged School Union, presided, and opened the proceedings with a short speech, pleading very earnestly for the cripples and the cause which the Odeon Company has taken up. The record specially made for these concerts by the Lord Mayor was recited, and could be heard clearly all over the hall. An interesting programme has been arranged for future concerts.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN, LEICESTER SQUARE, W.C.—The Chesterfield Lectures, founded in 1895 in connection with a silver medal presented by the Earl of Chesterfield to promote the study of dermatology (and which is open for competition to those who have attended three-fourths of the lectures), are free to medical practitioners on presenting their cards and to medical students who desire to attend regularly, and will be resumed at 49 Leicester Square on Thursday evening, October 3, at 6 P.M. The Chesterfield lecturer, Dr. Morgan Dockrell, will give his opening lecture on "The Present Position of Dermatology." After each lecture demonstrations will be given on special cases, followed by clinical instruction up to eight o'clock on patients presenting themselves in the out-patient department. The lectures are essentially practical, and deal fully with diagnosis and treatment, being illustrated by large diagrams, clinical and microscopical, specially prepared for each lecture.

THE Lord Mayor of London laid the foundation-stone of a new wing of the Buchanan Hospital, St. Leonards-on-Sea, on Tuesday, September 24. This hospital was founded in 1881, mainly by the beneficence of the late Miss Elizabeth Merrlees, and since then has been considerably enlarged and extended. It consists of 19 beds in the general wards and three private wards, with a distinct building for out-patients. Last year 246 in-patients were treated, and there were 8,933 out-patients' attendances. For some time past the need of a children's ward has become very apparent, and in March last the late Mrs. Thomas Mason gave £3,000 for the erection of a children's wing. Plans of a handsome building were prepared by Mr. H. Ward, A.R.I.B.A., of Hastings. As, by the donor's wish, the bulk of the money has to be expended on the building, the hospital is in urgent need of funds in order that the considerable increase of expense involved in this large addition may be met. The new wing will consist of a large ward, to contain from 12 to 18 cots, with a verandah (leading out on to a playground), board-room, secretary's office, and an isolation ward, with kitchen, bath-rooms, etc., complete.

THE medical session of King's College opens on October 1 next, when the annual distribution of prizes to successful students will take place. The opening address will be delivered by Dr. W. H. Allchin, M.D., F.R.C.P., Consulting Physician to the Westminster Hospital, at 4 P.M. The museums and laboratories will be open to visitors.

THE surgical dispensary for fisherfolk at Point Law, Aberdeen, was closed early in the present month after a long and unusually busy season. The number of dressings done exceeded 1,100, while the number of patients treated was 345. The dispensary fulfils a want, and the good work that it does yearly is thoroughly appreciated by the fisherfolk.

ST. BARTHOLOMEW'S HOSPITAL AND MEDICAL SCHOOL.

DURING the past year the following changes have taken place in the teaching staff :—

Dr. Christopher Addison, who was formerly Dean of Charing Cross Medical School and Professor of Anatomy at the University College, Sheffield, has been appointed Lecturer and Senior Demonstrator of Anatomy.

Mr. W. D. Harmer has resigned the Assistant Surgeoncy, and has been appointed Surgeon in charge of the Department for Diseases of the Throat and Nose. Mr. F. A. Rose has been appointed Assistant Surgeon for Diseases of the Throat and Nose. Mr. G. E. Gask has been appointed Assistant Surgeon and Teacher of Clinical Surgery.

Dr. W. S. A. Griffith has been elected Physician Accoucheur with charge of out-patients, and will give part of the clinical lectures on Diseases of Women. Dr. H. Williamson has been elected Assistant Physician Accoucheur and Clinical Lecturer in Midwifery.

Dr. J. A. Willett has been appointed Demonstrator of Midwifery. Mr. C. E. West has been elected Assistant Antral Surgeon. Mr. C. Gordon Watson has been appointed Surgical Registrar, and has resigned the Demonstratorship of Anatomy.

Mr. L. B. Rawling has been appointed Demonstrator of Operative Surgery. Mr. R. C. Ackland has been appointed Dental Surgeon and Mr. F. Coleman Assistant Dental Surgeon. Mr. R. C. Elmslie has been appointed Demonstrator of Pathology and Dr. H. Pritchard and Mr. H. G. Ball have been elected Junior Demonstrators of Pathology. Dr. H. G. Adamson has been appointed chief assistant in the Department for Diseases of the Skin.

Dr. C. M. H. Howell has been elected Junior Demonstrator of Physiology, and Mr. T. S. Lukis and Mr. C. T. Neve have been appointed Assistant Demonstrators of Biology.

The following awards of scholarships and prizes have been made during the year 1906-1907 :—Lawrence Scholarship, G. T. Burke, J. C. Mead (equal); Brackenbury Medical Scholarship, E. A. Cockayne; Brackenbury Surgical Scholarship, P. L. Giuseppe; Matthews Duncan Prize, R. B. S. Sewell; Kirkes Scholarship and Gold Medal, G. T. Burke; Walsham Prize, P. L. Giuseppe; Bentley Prize, H. J. Cates; Hichens Prize, S. Dixon; Wix Prize, A. W. J. Cunningham; Senior Scholarship, A. P. Fry; Junior Scholarship, R. G. Hill, C. D. Kerr, J. W. Trevan (equal); Sir George Burrows Prize, A. W. G. Woodford; Skynner Prize, P. L. Giuseppe; Harvey Prize, K. Bremer; Treasurer's Prize, R. G. Hill; Foster Prize, W. C. Dale; Shuter Scholarship, R. R. Armstrong.

SHOULD SPENDTHRIFTS BE PLACED UNDER RESTRAINT.

FROM the stage of utter mental darkness we find gradations through all the various phases of insanity up to those forms of mental aberration which are on the very threshold of insanity. Attempts have been made to frame a general definition of all these phases, but without success. They run, like the gradations of colour, so much into one another that those contiguous to each other seem the same, whilst those more distant seem to have no relation whatever for the purposes of a definition, their differences being so great. The divisions of idiocy and lunacy, monomania and imbecility adopted by jurists, point to well-marked phases of the disease, but leave those others untouched which are intermediate, and hence in former times arose a legal difficulty in deciding whether he was an idiot or a lunatic, who was something between both.

The Roman Law dealt with prodigals and spendthrifts in much the same manner as lunatics. Speaking of such characters, Ulpian, the great Roman lawyer, says: "By the Law of the Twelve Tables a Prodigus was interdicted from the administration of his property. This rule of law was first based upon legal custom, but nowadays, prætors or præsides, finding such a man who puts no limit to the direction or amount of his expenses, but exhausts his substance in a destructive and dissolute manner, are wont to give him a Curator after the example of a Furiosus [madman], and both of them are confined under the guardianship of the curator until in the case of the furiosus he recovers from his insanity, and of the prodigus, he returns to good behaviour, which event, when it happens, absolves them respectively from the guardianship of their curators." The legal incapacity of a prodigal to act was founded upon a similar reason to that which denied a like capacity to minors and women—namely, the supposition of a mental infirmity. The deprivation of his capacity to act assumes that the prodigus was previously possessed of that capacity, and that he was not labouring under the incapacity of age. The words of the decree made in such cases were as follows: "Inasmuch as your ancestral property left to you is squandered by you iniquitously, and your children reduced to poverty, I for such cause interdict you the administration of the same, and also from all commercial dealing with others." He could not alone alienate his property, nor could he make a money payment, and if he did his curator could recover it back. His prodigality was obliged to be proved from acts, not words. Nor was the law against prodigality confined to the male sex, for women of extravagant habits, the "pretty horse-breakers," and costly dressing damsels of ancient Rome were fit subjects of the interdict. But in addition to being deprived of their legal capacity, the prodigi were subjected to a species of infamia similar to that which prevailed in the Greek laws of Solon, whereby they were excluded from all public offices. By the Lex Roscia, prodigi were not allowed to sit within the fourteen rows in the theatre but were allotted distinct places. Many senators were removed from the senate and degraded, some by the censors and some by the Emperors, for prodigality, particularly by Tiberius Cæsar, as mentioned by Tacitus. Adrian used to have them brought into the forum and publicly disgraced. Some were kept in durance vile in their family vaults as a sort of black hole; some were fined and punished in various ways.

The Roman law of prodigals did not continue to preserve its stringent character. It was greatly modified by the Emperor Leo (Const. 39). This constitution was enacted to remedy the abuses which had arisen from a maladministration of the law, and, after stating that no man was so perfect in his conduct as not to act foolishly sometimes, nor any man so imprudent but what he might occasionally act

discreetly, adjudged that whilst a prodigal was under the *interdictio bonorum*, such of his acts as were acts of discretion should have validity—otherwise not so. The result of this enactment was to introduce an amount of uncertainty as to acts of prodigality, which did not previously exist. The question, then, necessarily arose whether such acts were of that character as to exempt them from the operation of the interdiction. The evil of this uncertainty was greater than the evil it sought to remedy. But the same difficulty which pressed upon the Emperor Leo afterwards pressed upon the framers of the Code Napoleon.

The above is a concise view of the leading features of the Roman law of Insanity and Prodigality. The Romans were not only a warlike, but also a very practical, common-sense people. They legislated much and well. The tenacity with which the Roman law held its ground in different parts of Europe after the destruction of the empire was not due to its Roman birth, but to its intrinsic excellence being suitable to the wants of men, apart from their nationalities. Although the varying conditions of different States necessitated modifications of that law, yet in its leading principles it remained the same. The law as to furiosi being incapable would be pretty much the same in all nations, the incapacity being founded on a natural fact (mental incapacity), about which all reasonable men must entertain a similarity of opinion. With prodigals it is different; nations may well disagree as to what is, or is not, an act of prodigality, some having more stringent notions upon it than others. Then, again, there may be a diversity of opinion as to the expediency of legally restraining prodigality, some thinking it better that a subject should have the power of beggaring himself and his family, others the contrary. England and America have adhered to the first view—most Continental nations to the second.

We now come to the English law upon insanity and prodigality. With the exception of the sumptuary laws, and a passage in Horne's "Mirror of Justice," the English system did not restrain prodigality. Lord Hardwicke, in *Barnesley, Ex parte*, said, "Possibly the law may be too strict, and it might be useful in some cases that a curator should be set over prodigal and weak persons, as in the Roman law." Lord Eldon, in *Ridgway v. Darwin*, "felt a strong inclination that the Legislature should take measures to preserve persons in a state of imbecility, laying them open to as much mischief as insanity." Lord Thurlow expressed a similar opinion. As a rule, it is the families, and not the representatives of them, which make a nation great; and in matters of legislation the interest of the family rather than the licentiousness of the representatives, should be considered. But it may be objected that legal restraint of prodigality would only have the effect of saving the *debris* of the property. Scarcely so; for the knowledge that he could be restrained by law would make the prodigal more circumspect in his behaviour, the opportunity for dissipation would be lessened, and the inducement likewise. The mere prospect of saving only the wreck of a noble estate should no more prevent the law from withholding assistance than the prospect of saving only a small portion of burning property should prevent the firemen from exerting themselves to put out the fire. Sir Thomas Ridley complained that a prodigal "is suffered to waste and spend his goods until there be nothing left (as though the prince and the commonwealth had no interest in such a subject, to see he did not waste his estate and abuse his goods), whereby many great houses are overthrown, and many children whom the fathers carefully provided for, never leaving raking and scraping all their lifetime that their children after them might live in great plenty and abundance, come

to great shame and beggary." It is a difficult matter to say how far the laws should interfere with a man in the disposition by him of his property; but the same discrimination which can determine what is an act of wanton cruelty to an animal by its owner is surely able to decide what is an act of wanton prodigality of an estate by its owner. Had the principle of the Roman law been bad it is scarcely likely

that it would have held its ground from one end of the Continent of Europe to the other for so many centuries; and to suppose that all these civilised nations are wrong in their legislative notions upon this point, and that England alone is right, recalls to mind the expression of Cicero ("De Orat." I. 44)—*Incredibile est enim quam sit omne jus civile præter hoc nostrum inconditum et paene ridiculum.*

SOCIAL PROBLEMS OF THE DAY.

THE STATE CHILDREN'S AID ASSOCIATION.

THE sixth report of the State Children's Aid Association, comprising the work done in the years 1904, 1905, and 1906, is moderately encouraging to those who believe that it is best for the welfare of pauper children that they should be brought up in conditions as nearly as possible resembling those of a good normal home. There is but a small increase in the number of children boarded out either beyond or within the union to which they belong—and it is to boarding out beyond that one must look for the eradication of evil influences and the pauper taint; but there is an increase in the number of unions which are now placing the children under their care in scattered homes instead of in barrack schools. The scattered home has the advantage, in the eyes of Guardians, that it is more easily inspected and more completely under Poor-law control than the distant cottage where one or two children are boarded out. The inspection difficulty is the greatest in boarding out. The Guardians must to some extent be guided by the advice of the Local Committee, and occasionally the members of that, in choosing homes for the children of the State, are more influenced by a desire to provide for their own dependents than by a careful determination to place the children in the best possible environment. Another difficulty is the jealousy of those who are not trusted with the union children against those who receive them, and it is unfortunate that this jealousy is echoed by those who have no personal grievance in the matter, and who have advantages of education and position that should enable them to take a wider and more philanthropic view of the question. For our own part, we believe that the upbringing to be obtained in any respectable cottage is the best for a child; but Guardians require to be assured of the absolute single-mindedness of those to whom they must necessarily leave great part of the supervision of any child boarded outside the union. Lastly, there are always to be found in every Board of Guardians members who, in the supposed interests of economy, protest against allowing the expenses of a Guardian or Guardians who are sent to see a single child or a handful of children who are boarded at any considerable distance. Yet such visits are necessary, and we doubt if the utmost sum that was ever spent in such travelling expenses would make up the difference in cost between the maintenance of a boarded-out child and that of one in a barrack school. But this is a point which these short-sighted economists overlook.

Scattered homes are a fairly good compromise between boarding-out and herding in barracks. The placing of ten or twelve children of different ages under the care of a good kindly woman fairly well simulates home conditions, and, as the children go to the ordinary school and mix in other ways with the mass of the population, they get that training in citizenship which is the most valuable part of education; but it is to be feared that in any, even the humblest, community the scattered home may suffer a kind of segregation which will make the children feel that they are paupers, and nullify the intentions of those who removed them from the workhouse and its environments. But such a criticism, if applicable to the scattered home, is far more true of the

self-centred village community. In these, children drawn from the same environment form a little world of their own, with which the outer world comes only slightly into contact. The system is, moreover, exceedingly costly. The village community of the Bermondsey Guardians, at Shirley, accommodating 560 children, cost over £320 per bed, while the average cost of each child maintained there was £1 1s. 9d. a week. Poplar lived up to its reputation by spending £162,000 in providing accommodation for about 700 children. This expense is not atoned for by any special advantage in the community system. As the children are housed in numbers of from forty to sixty in one building the whole tone of the place must be more institutional than home-like. The supervision may be more individual and thorough than in a barrack school, but otherwise the conditions are no better. Infectious disease, when once introduced among a large number of children is difficult to eliminate and has a smaller field to conquer there than in the larger schools; but at the best the difference between the village community and the barrack school is one more of degree than of kind.

The report mentions two of the defects of barrack schools, in which 11,809 of the 68,000 children who are supported out of the rates are at present living. One of these is the liability to infectious disease, of which we have spoken, and which is attested by the reports of medical officers and superintendents of these institutions. The other, according to the statements of H.M. Inspectors of Schools, is that the standard of education is lower than in ordinary elementary schools. Another fault is that the children grow up in far more comfort than they are likely to meet with in the world without. Pauperism has been made pleasant to them in their youth, and they will not make any great struggle against it in their adult life.

Among the other work to which the State Children's Association gives its attention is the promotion of special Courts of Justice for children. At present there is only one special separate Court for juvenile offenders—that established at Birmingham through the energy of Mr. Courtenay Lord, but in many large towns children's cases are now heard separately. A consequence of the establishment of Children's Courts must be the appointment of probation officers, to whose care the children are committed, instead of being sent to industrial schools. He visits them in their homes, reports on their conduct, and assists and befriends them as he can. The Association is also agitating for that very necessary amendment of the Infant Life Protection Act, which will make it necessary to register, and possible to inspect, the "one-nurse child" cases among whom mortality due—one may suspect, but cannot prove—to neglect, if not to foul play, is so common. The Association is also using its influence in support of a Bill for the better protection of the children of vagrants, whom they would fain save from following in the ways of their parents. Indeed, with modest but persistent effort, this Association is helping every influence that promises to aid these children, so sorely handicapped in the race of life, to grow up into healthy, intelligent, self-respecting citizens. The offices of the Association are at 58 Old Broad Street, E.C. The Chairman is Lord Burghclere, and the Hon. Secretary Mrs. S. A. Barnett.

NURSING ADMINISTRATION.

THE COMMON TASK.

Correspondence and Queries for this section should be sent to the Editor of THE HOSPITAL, 28 Southampton Street, Strand, London, and marked "Nursing Administration."

MEDICAL MISSION WORK IN INDIA.

The motto of the Zenana Bible and Medical Mission Society is "The Women publish the tidings," and we note that this is well borne out in the recent report of work accomplished during the past year. Trained nurses are in great request for aiding in the medical missions, part of the endeavour being to train Indian women as nurses to labour among their own people. The society affords an advantageous medium through which those who desire to take up mission work in India may find their zeal turned to the best account.

THE BABY'S WELCOME.

A new movement in favour of promoting thrift among expecting mothers has been started in Wakefield, and seems likely to spread in many towns where an inadequate sense of the responsibilities of child-birth prevail. Charitable ladies are beginning to awake to the perception that more is needed to secure comfort for the newcomers than the bag of necessities which too often acts as a direct incentive to the mother to omit any personal preparations. The district nurse penetrating into the homes at the critical period, and getting to all the secrets of its unthrift, has opened the eyes of the public to a hundred fresh theories. The mothers need teaching even more than linen, and the smallest article bought as the fruit of their own forethought is of more value than all the garments which are lent around the parish and get to be known as the badge of an indolent mother. The familiar mothers' meeting often does much to develop this sense of thrift, but it might undoubtedly do more. It might furnish patterns of garments suitable for babies, and thus relieve the mother of the onerous duty of preparing some fifteen or eighteen separate articles for the overburdened baby's use. It might have model cots on view, and arrange with dealers to supply them at small cost. It might furnish papers giving simple directions about feeding. It might invite the district nurse occasionally to come and give a demonstration on the art of washing a baby, or give a homely talk

on some difficulties of feeding in connection with delicate babies. We notice that it is part of the Wakefield scheme to enlist the co-operation of district nurses, and we hope they will not stop short at collecting pennies from the mothers by laborious house-to-house visitation, but will take counsel with the superintendents as to the best methods of inspiring them with right principles of infant management.

THE DINNER-HOUR IN INSTITUTIONS.

It is curious, and not very creditable to the heads of institutions, that although it has now long been acknowledged that leisurely mastication is the first essential to digestion, meals are nowhere scrambled through with more indecent haste than in establishments dedicated to the cure of disease. The top speed necessary to satisfy the appetite in many hospitals is a standing menace to health, and the very complaints which the institution exists to cure may be observed in process of manufacture among the staff. Not only is the dinner-hour often reduced to twenty minutes by unpunctuality on the part of those who preside, or indifferent waiting, but bad organisation frequently prescribes that some of the nurses shall come short even of this bare minimum. The best that can be done under the circumstances is to drink the food, for eating which implies mastication demands time. Taking into consideration the moments spent in assembling, the intervals between courses, the delays of service, and the needs of late comers and early goers, it may be safely laid down that three-quarters of an hour is not too long to assign as the nominal dining hour if all are to have an opportunity of treating their digestive organs with respect. Punctuality and smart service may succeed in making a half-hour dinner tolerable, but any appearance of haste is entirely destructive of the right atmosphere which ought to prevail. We heard recently of a large institution where a scanty quarter of an hour was all that was available for the principal meal of the day, and we wish that we could believe that this were an isolated instance of a very bad custom.

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